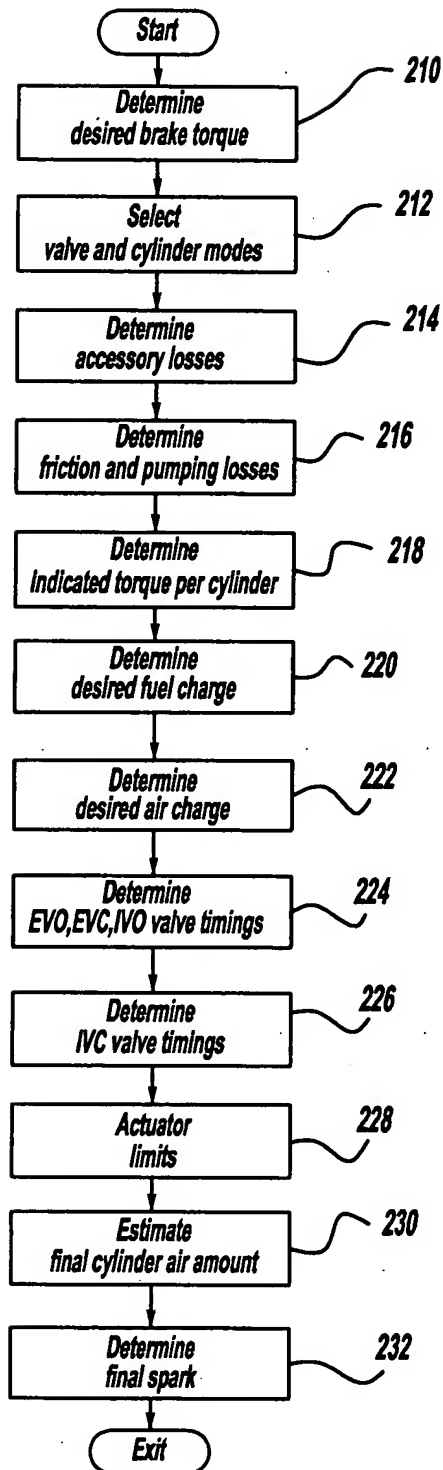
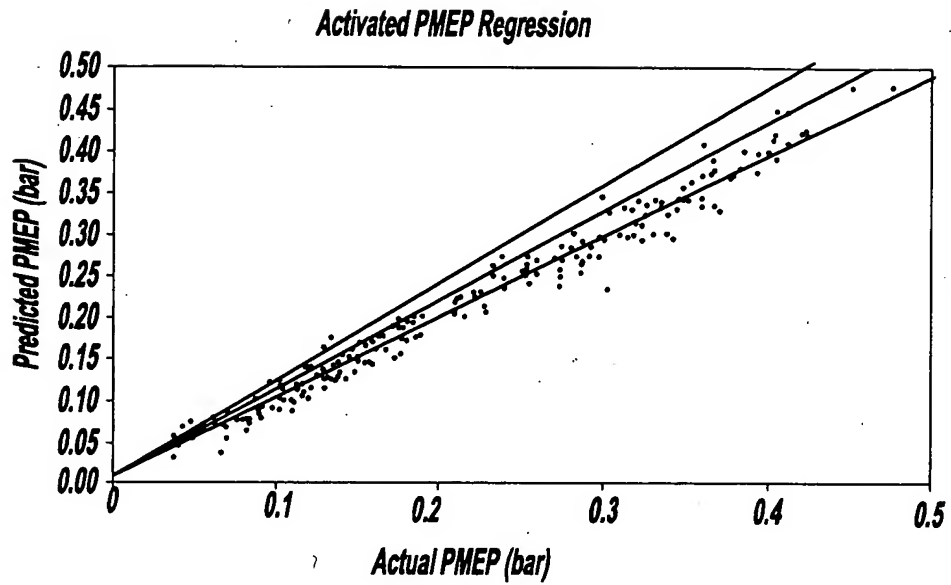
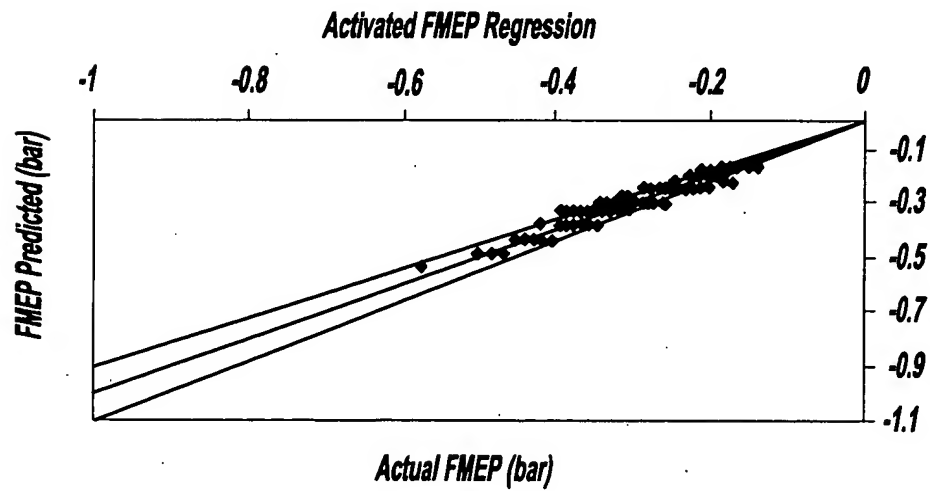
**FIG - 1**

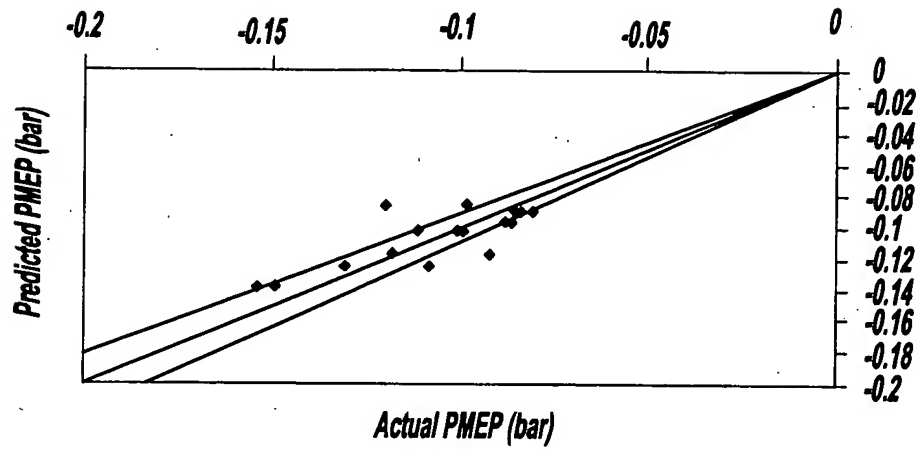
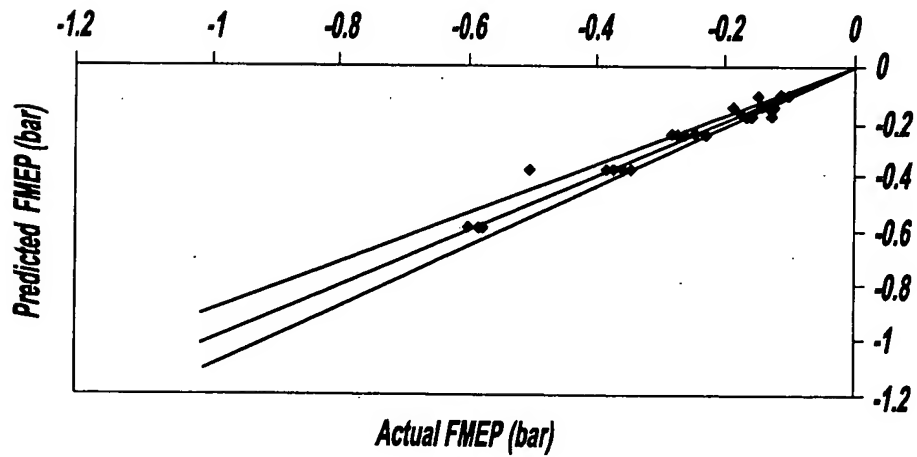
**FIG - 2**

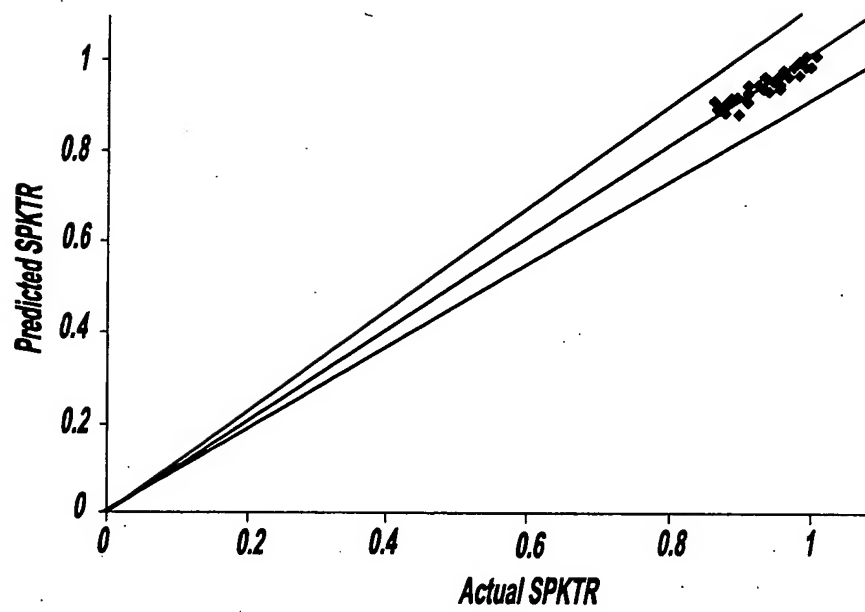


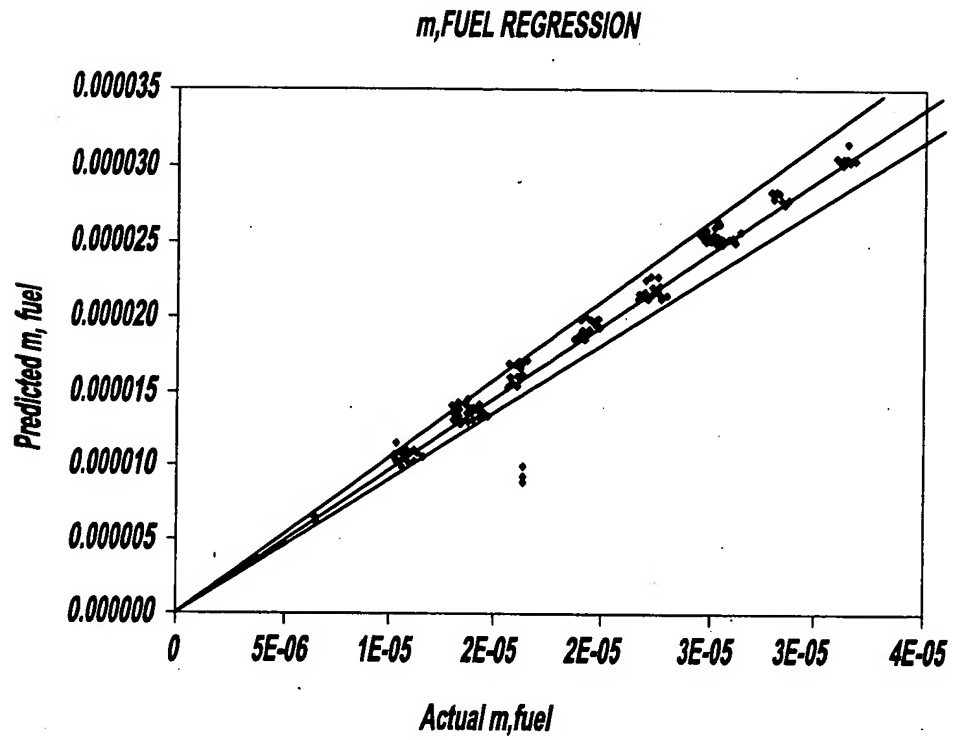
**FIG - 3**



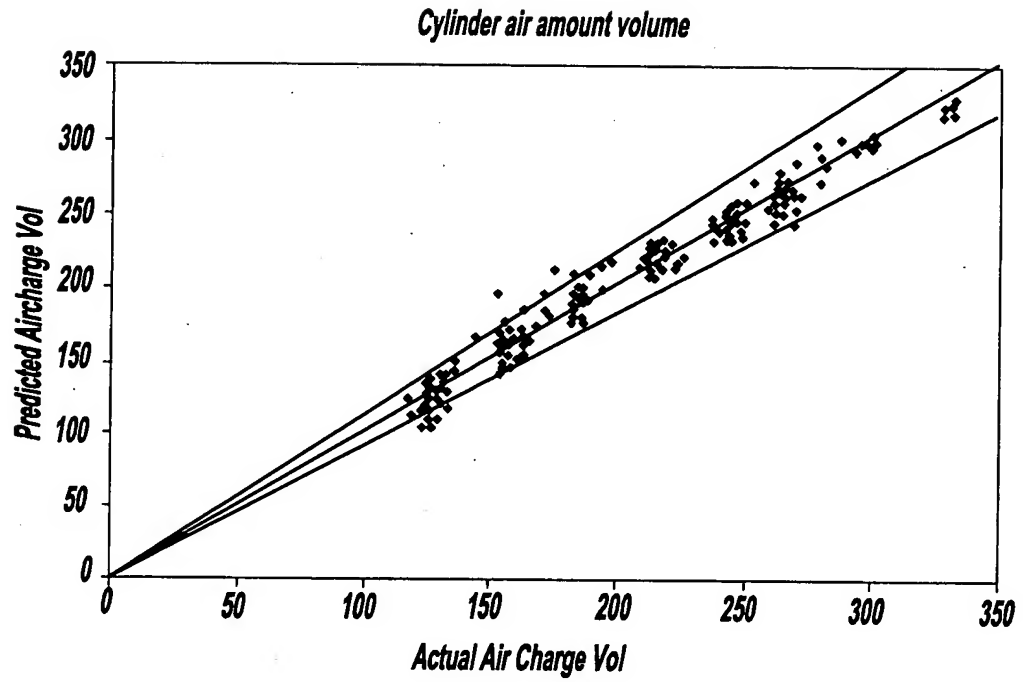
**FIG - 4**

*Deactivated PMEP Regression***FIG - 5***Deactivated FMEP Regression***FIG - 6**

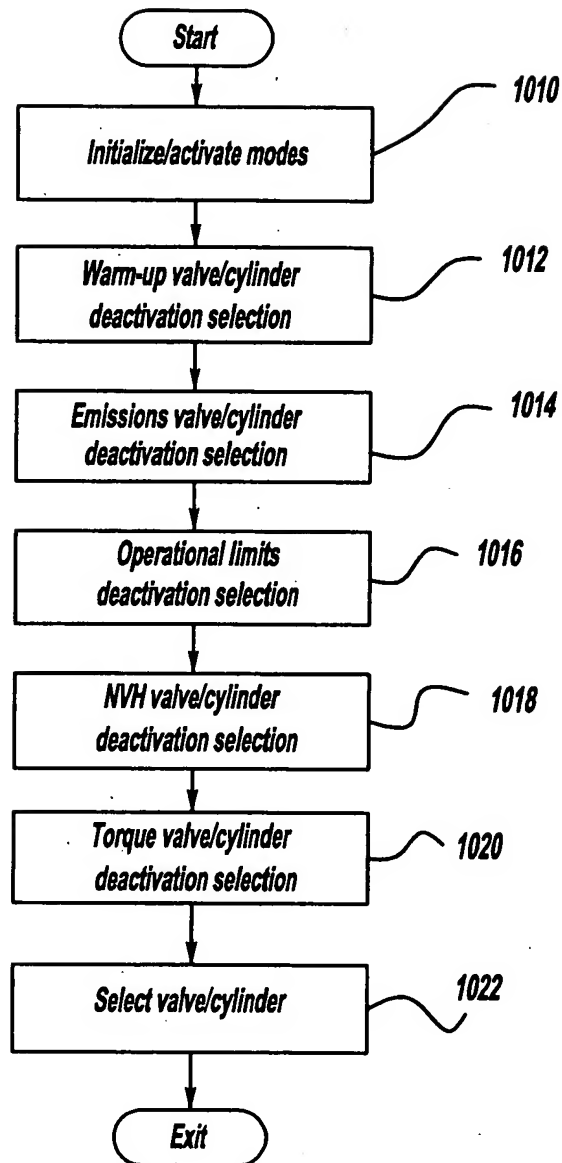
*Spark Retard Torque Reduction Regression***FIG - 7**

**FIG - 8**

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**FIG - 9**

**FIG - 10**



↑ DECREASING TORQUE

		<b>COLUMN 0</b>		<b>COLUMN 3</b>	
<b>V2</b>		1	1	1	1
<b>12-STROKE</b>		1	1	1	1
<b>V4</b>		1	1	1	1
<b>V8</b>		1	1	1	1
		<b>DIDE</b>	<b>DIAE</b>	<b>AIDE</b>	<b>AIAE</b>

→ DECREASING TORQUE

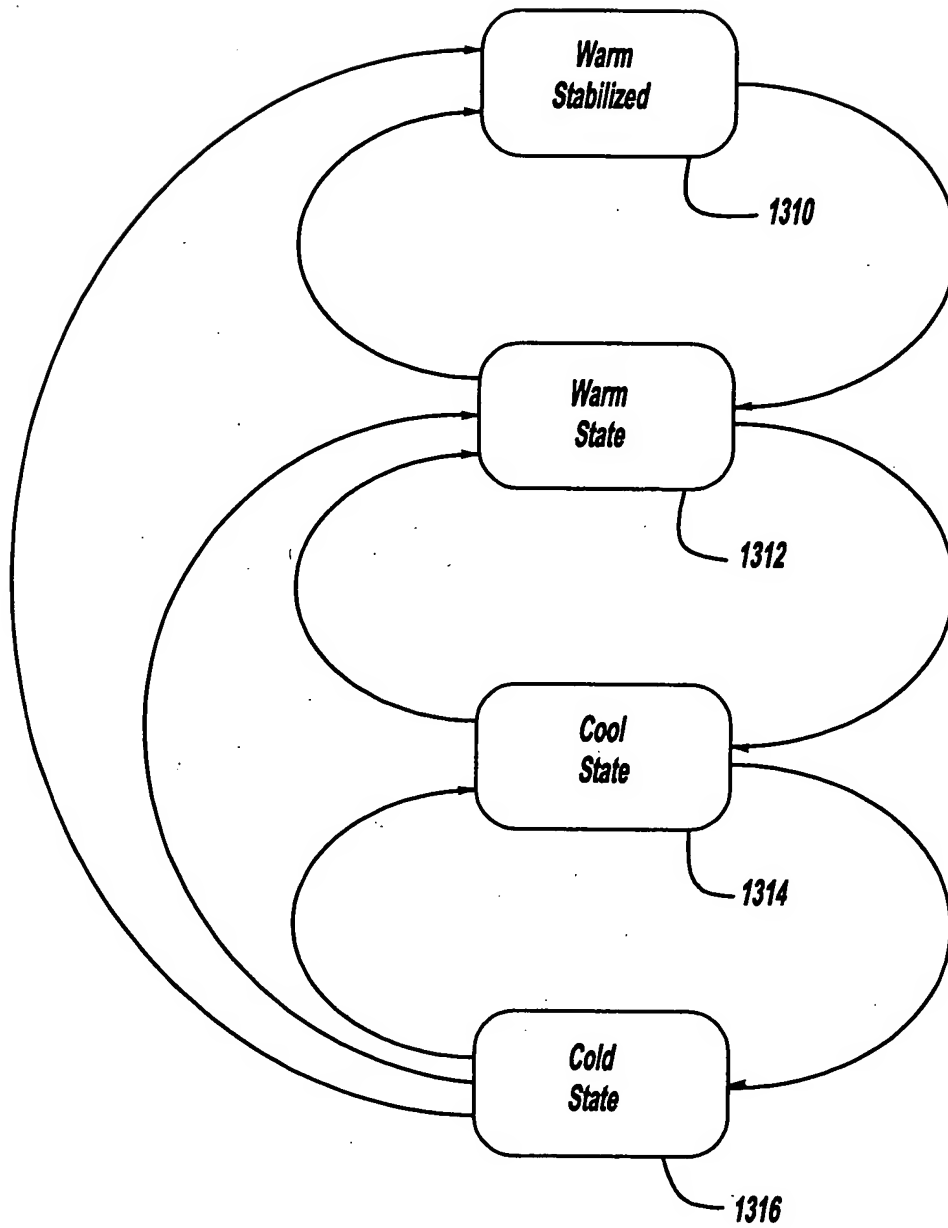
**FIG - 11**

↑ DECREASING TORQUE

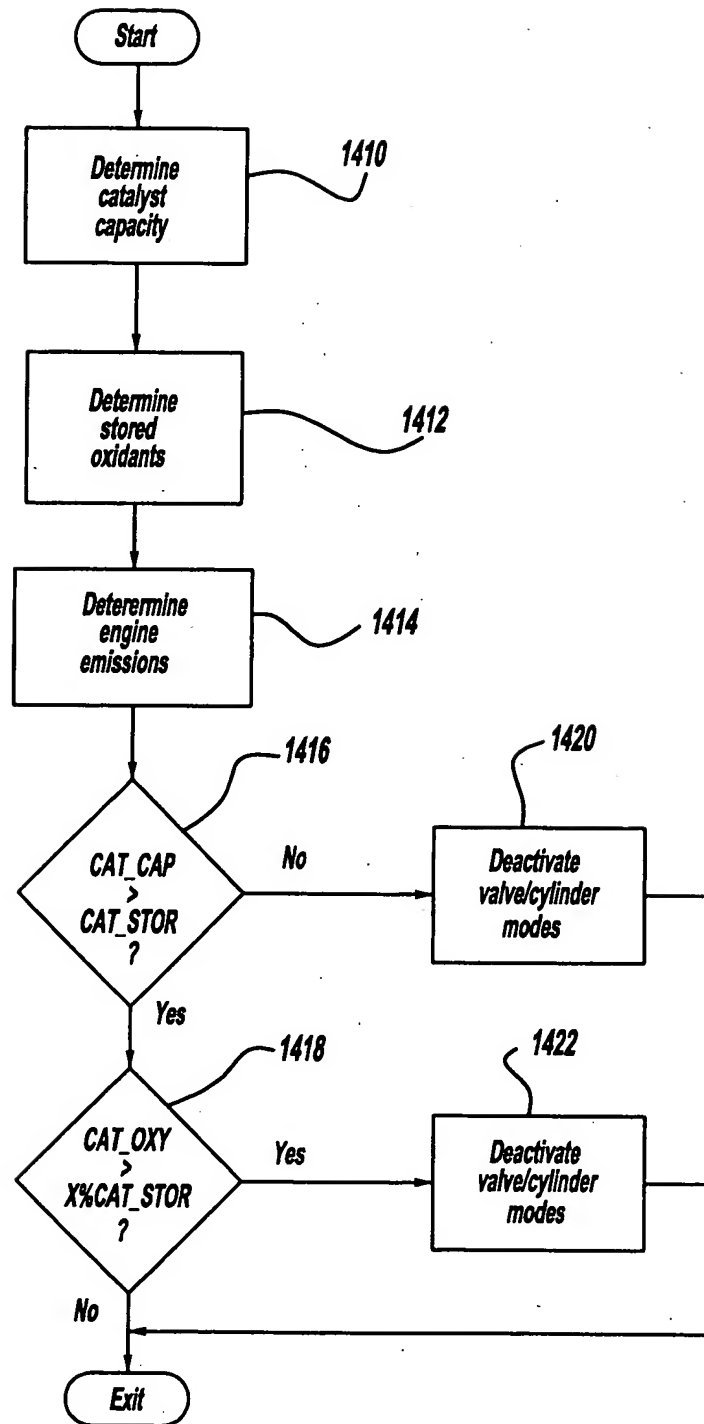
		<b>COLUMN 0</b>		<b>COLUMN 3</b>	
<b>V2</b>		0	0	0	0
<b>12-STROKE</b>		0	0	0	0
<b>V4</b>		1	1	0	0
<b>V8</b>		1	1	1	1
		<b>DIDE</b>	<b>DIAE</b>	<b>AIDE</b>	<b>AIAE</b>

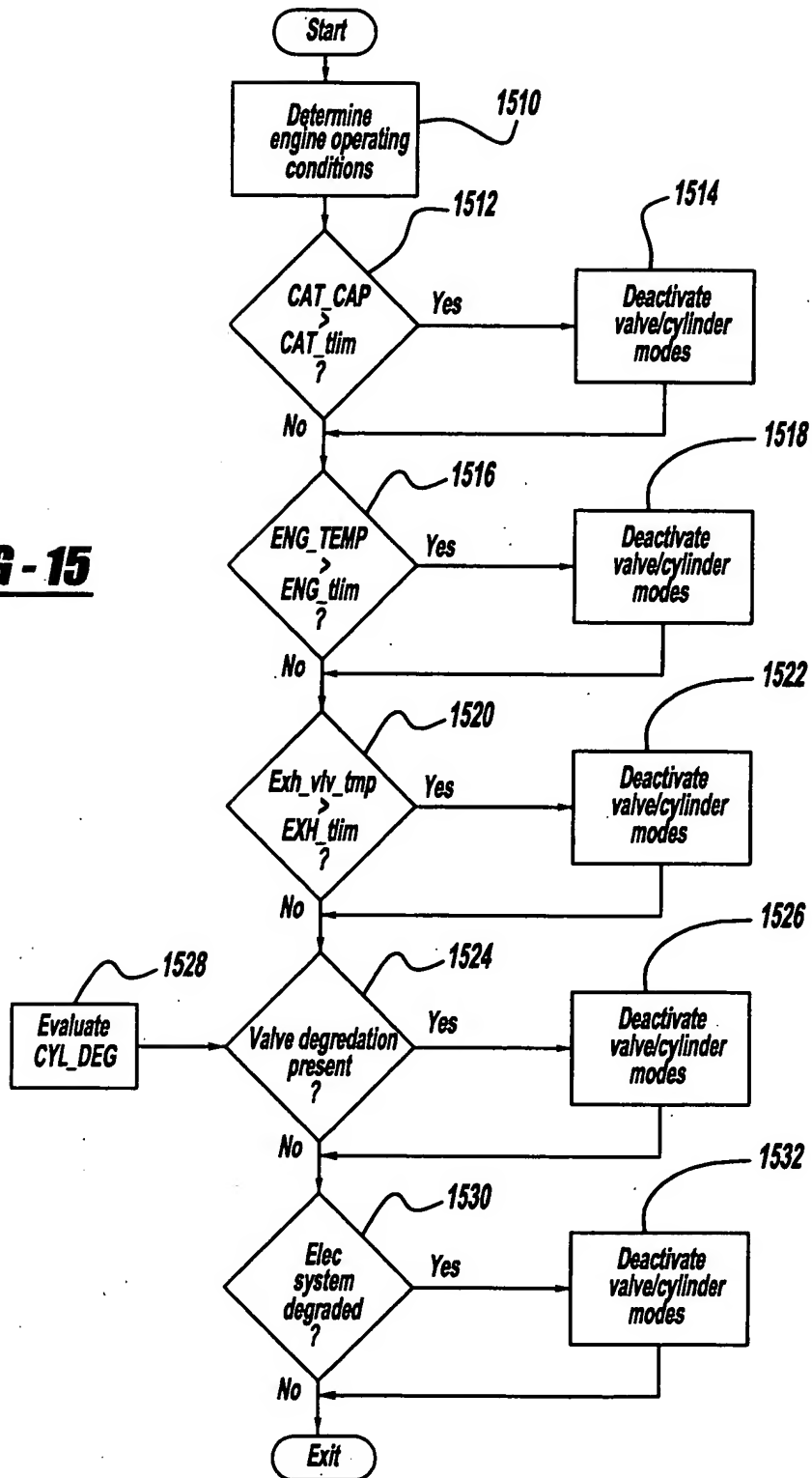
→ DECREASING TORQUE

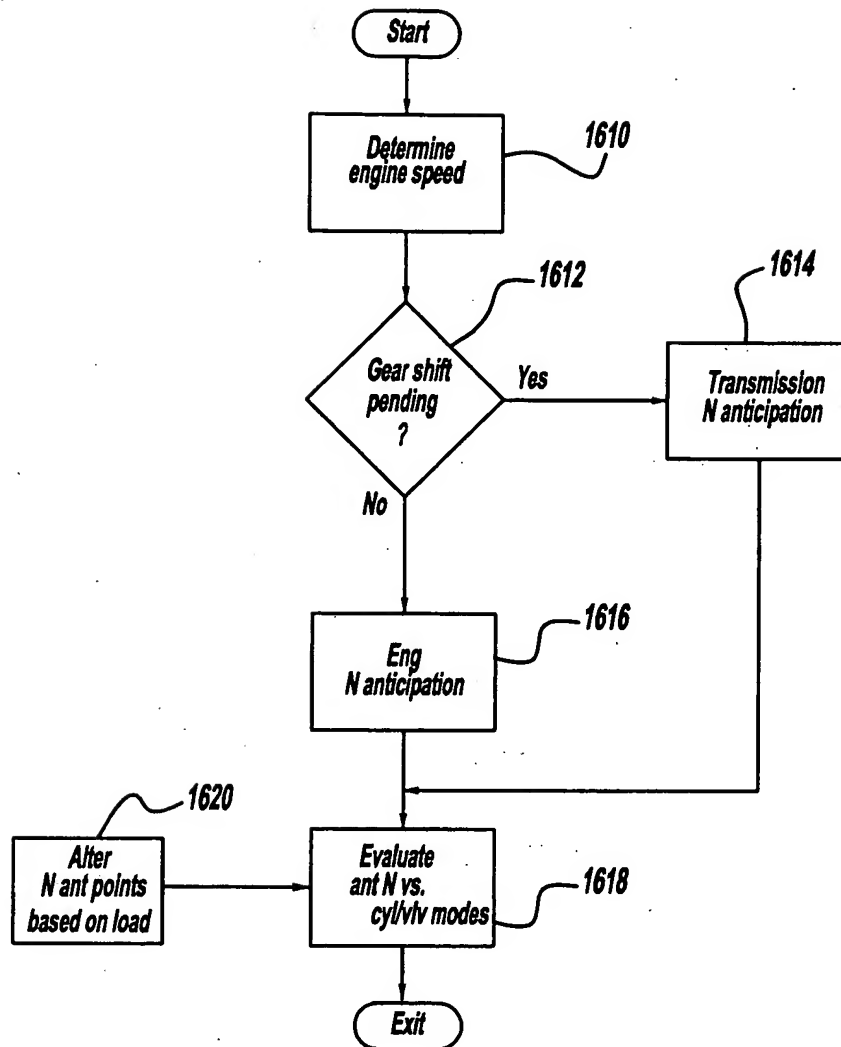
**FIG - 12**

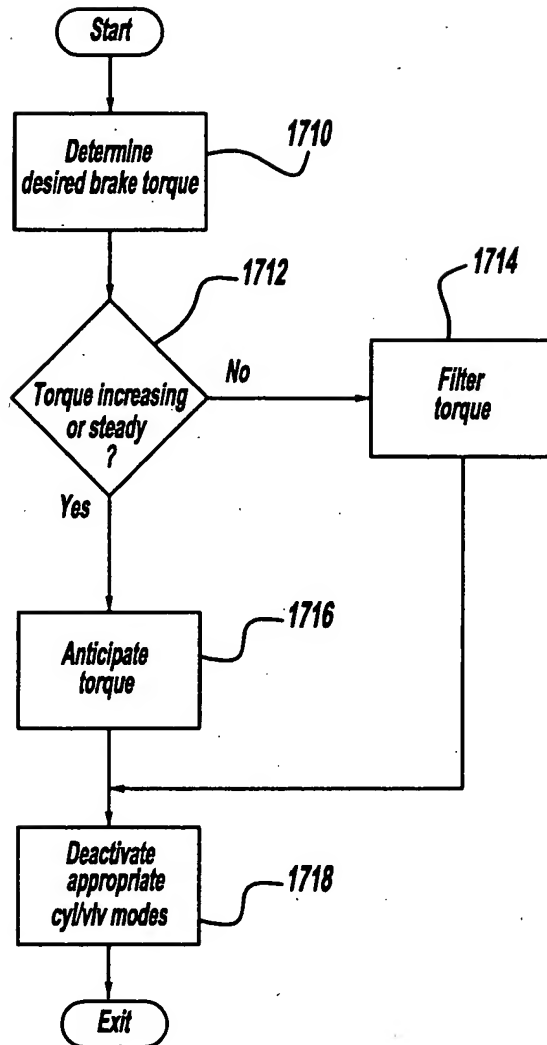


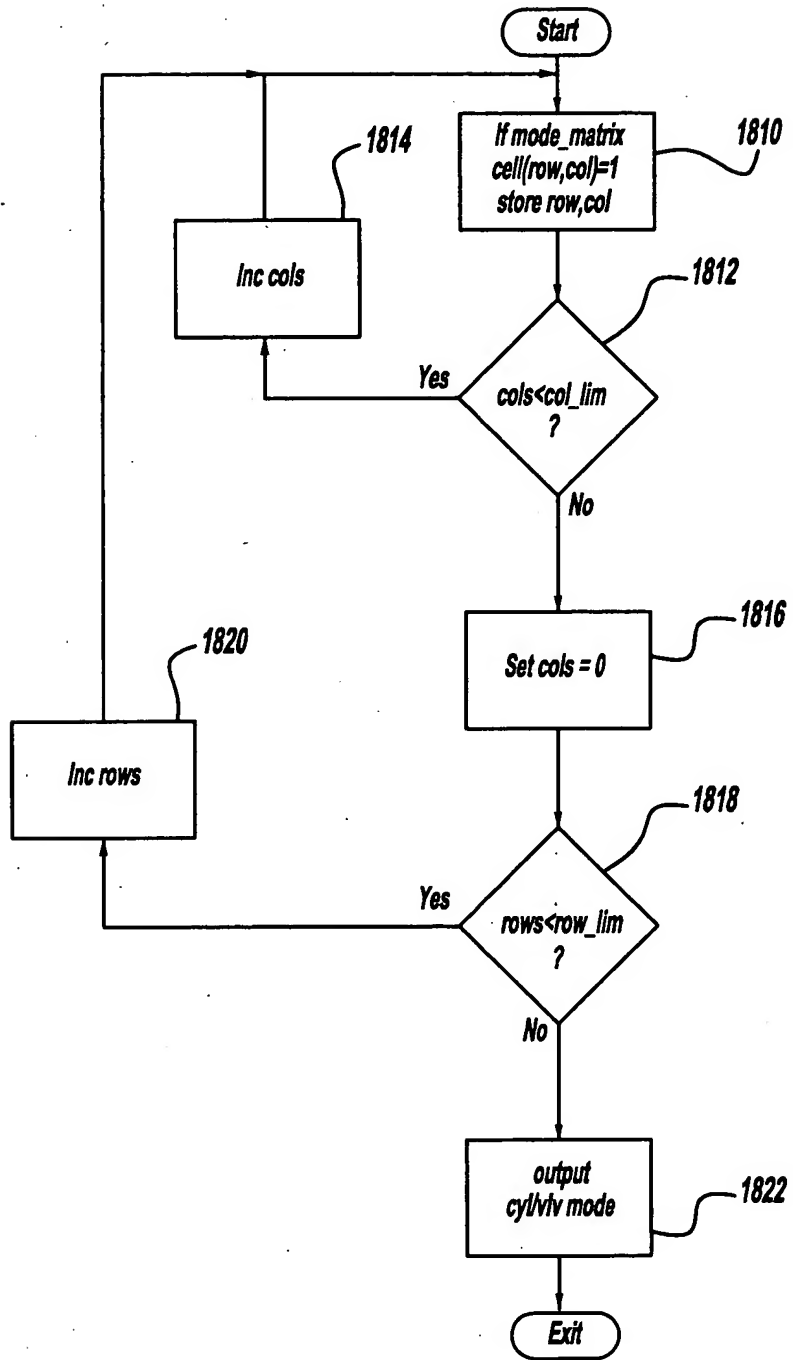
**FIG - 13**

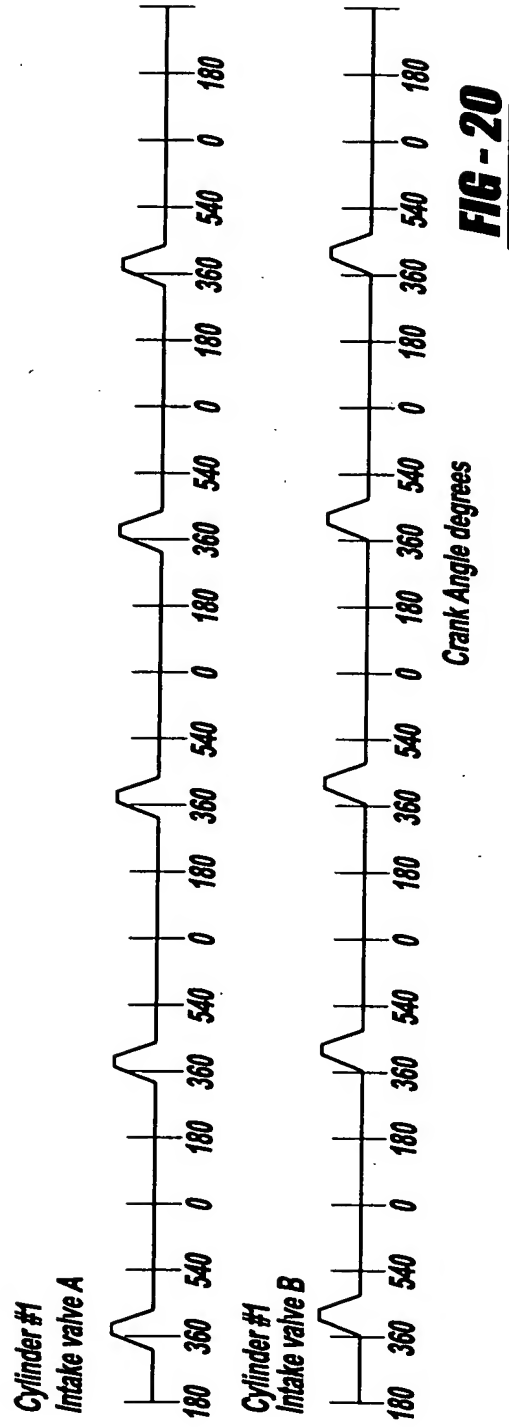
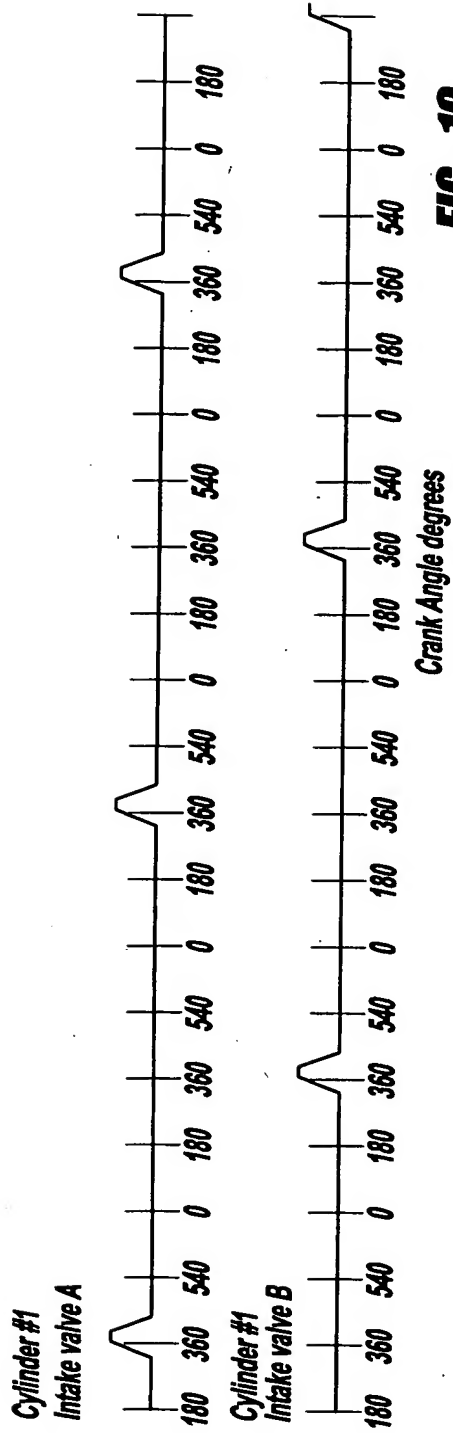
**FIG - 14**

**FIG - 15**

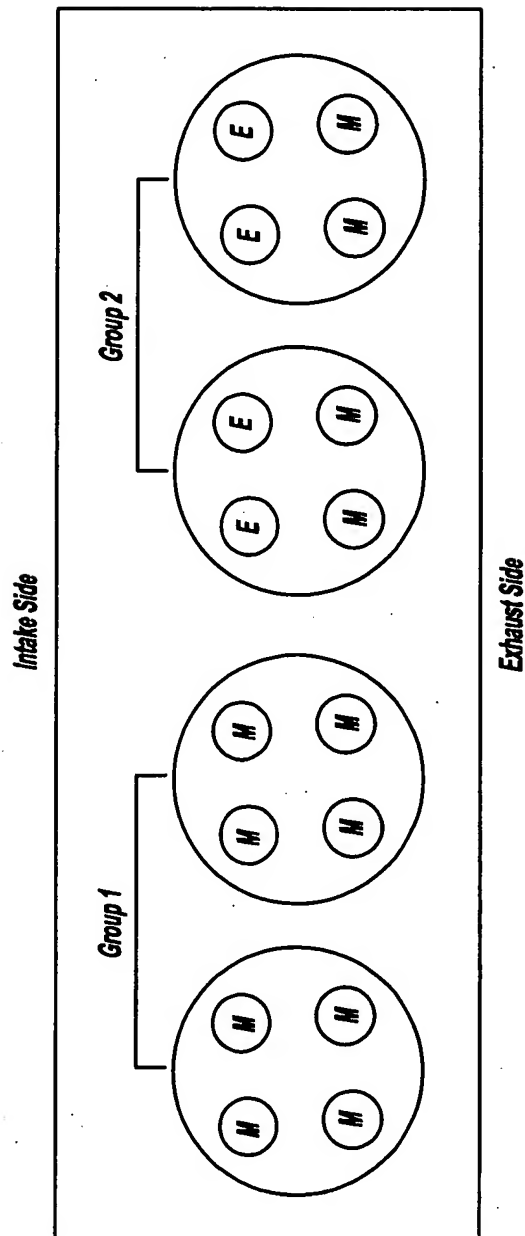
**FIG - 16**

**FIG - 17**

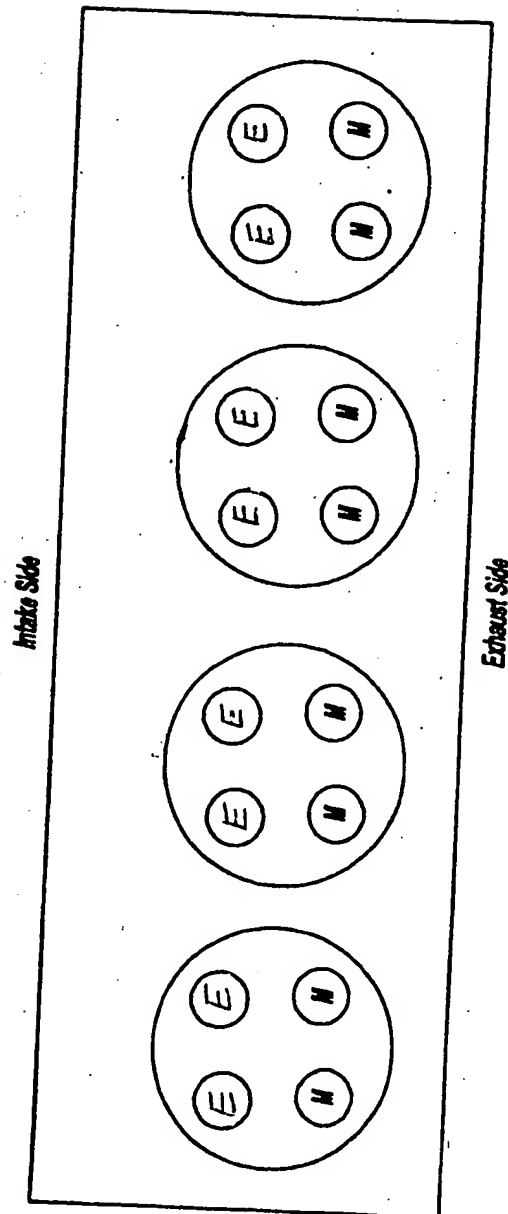




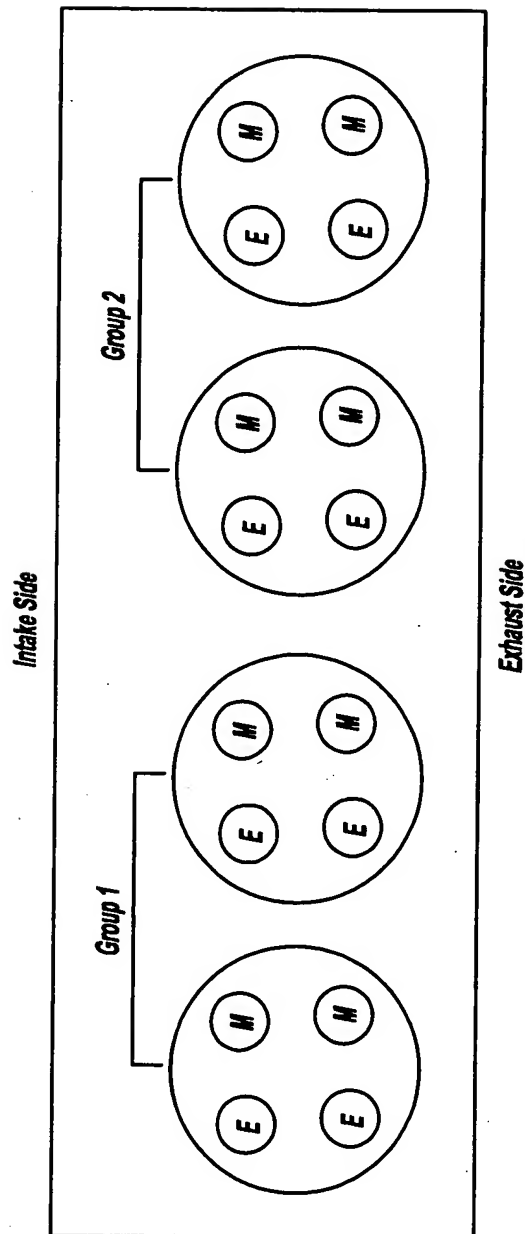




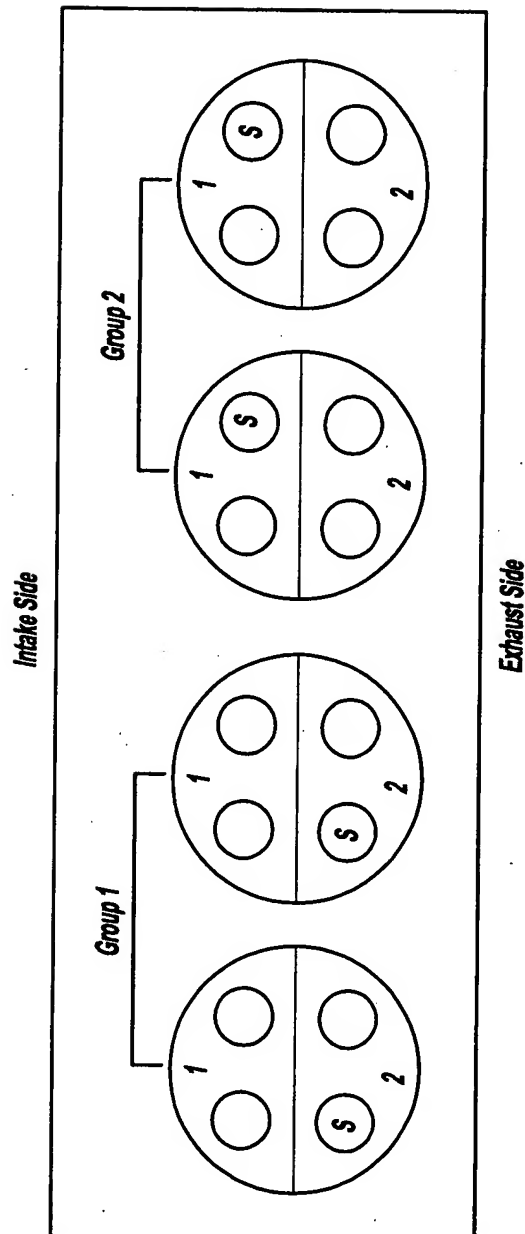
**FIG - 21**



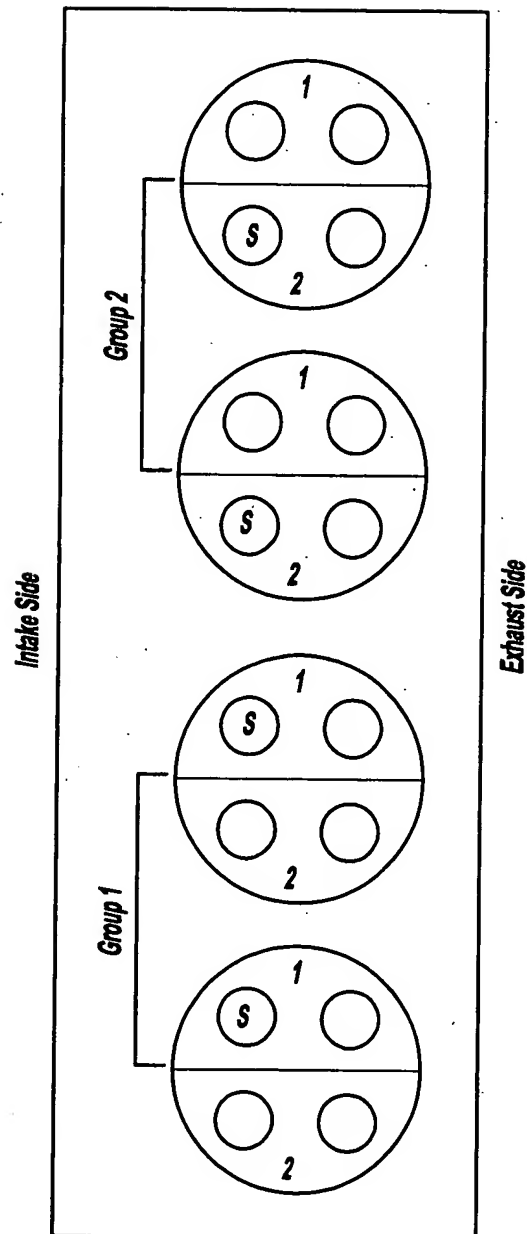
**FIG - 21A**



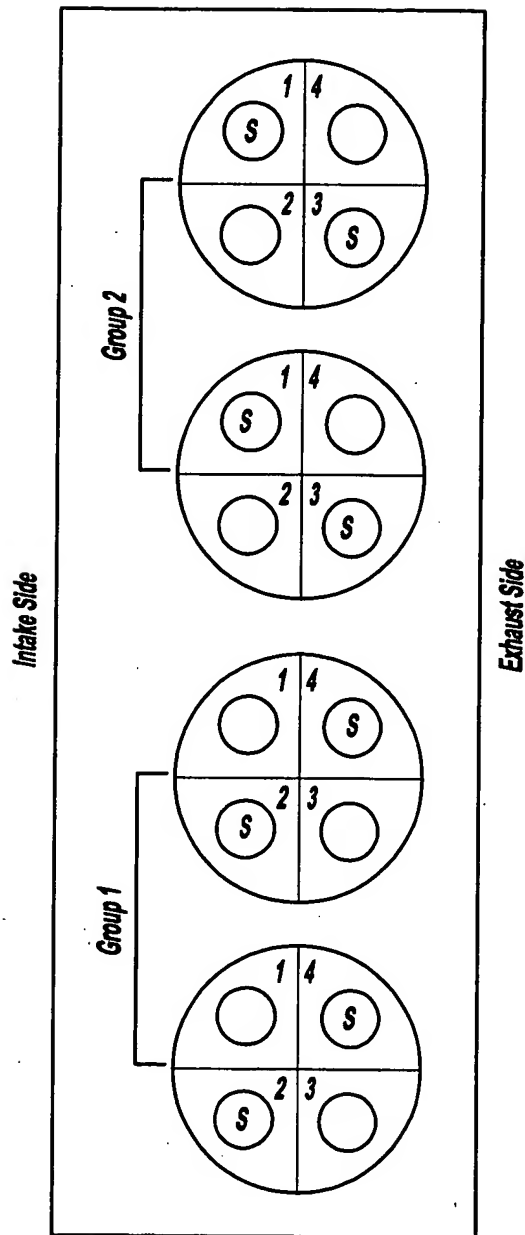
**FIG - 22**



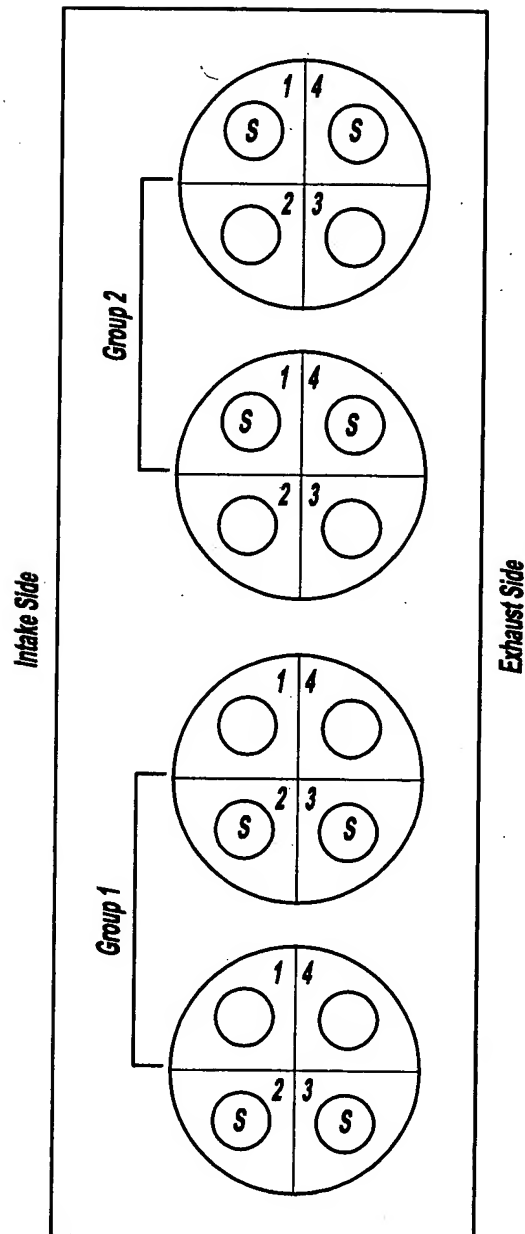
**FIG - 23**



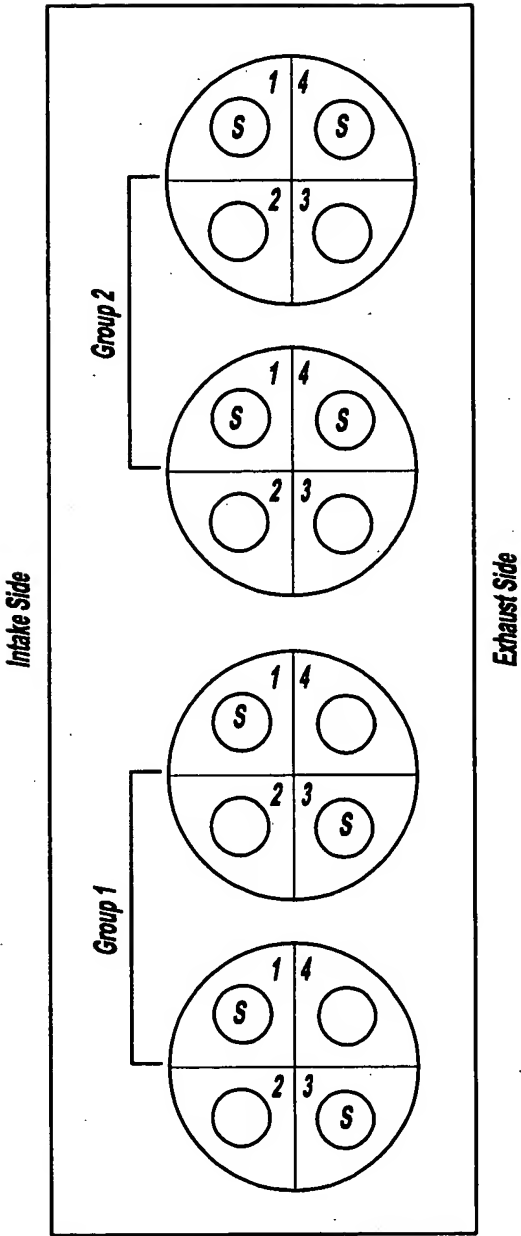
**FIG - 24**



**FIG - 25**

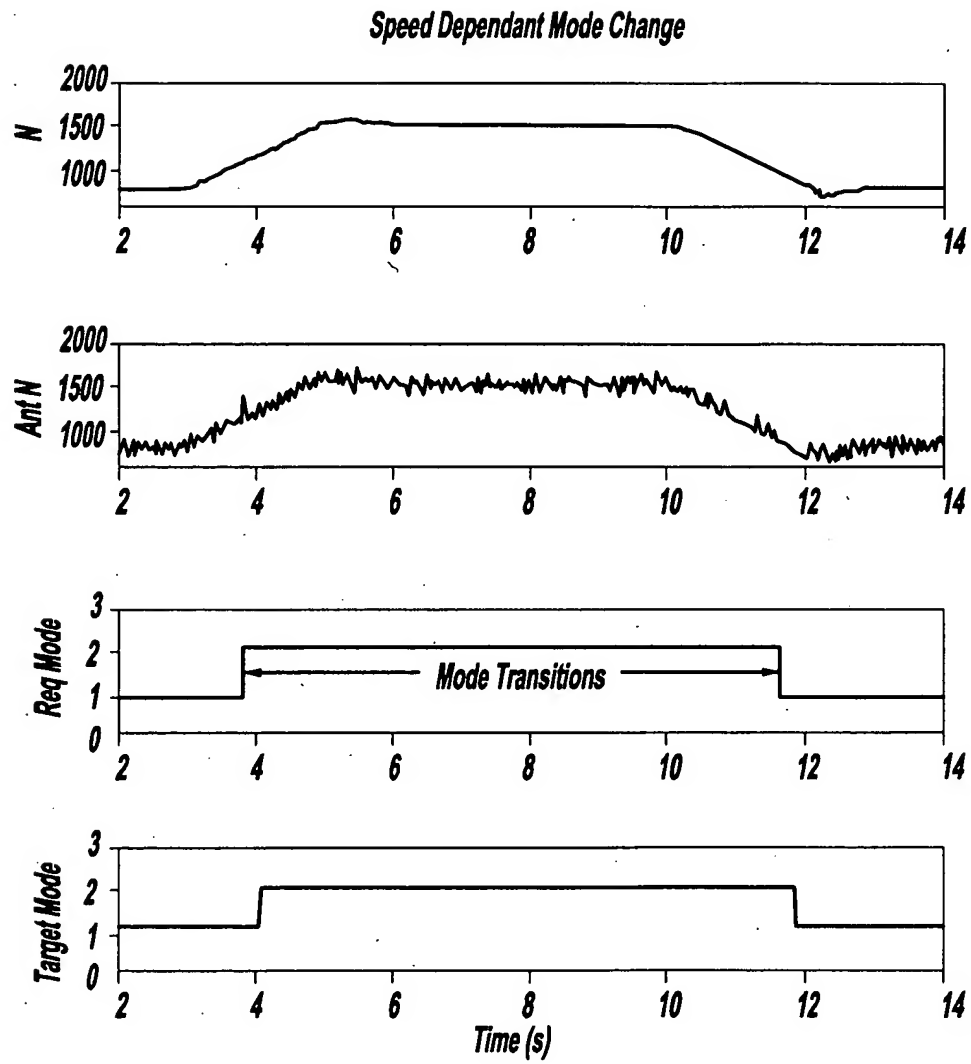


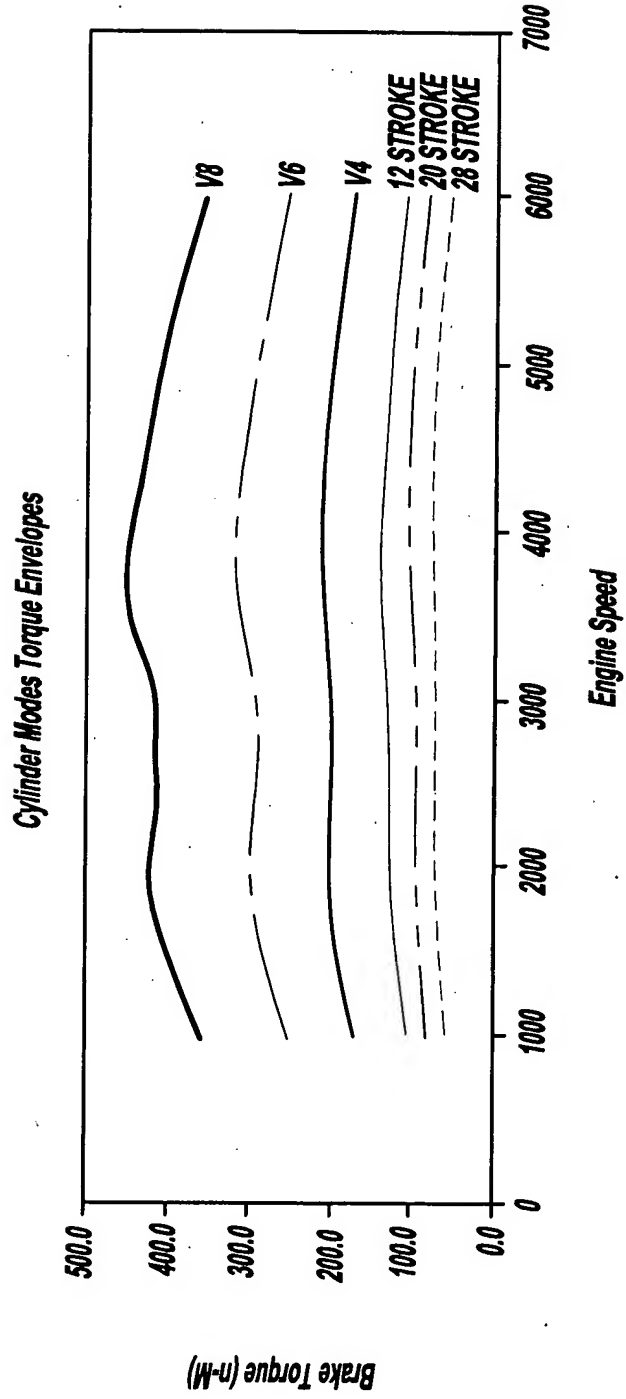
**FIG - 26**



**FIG - 27**

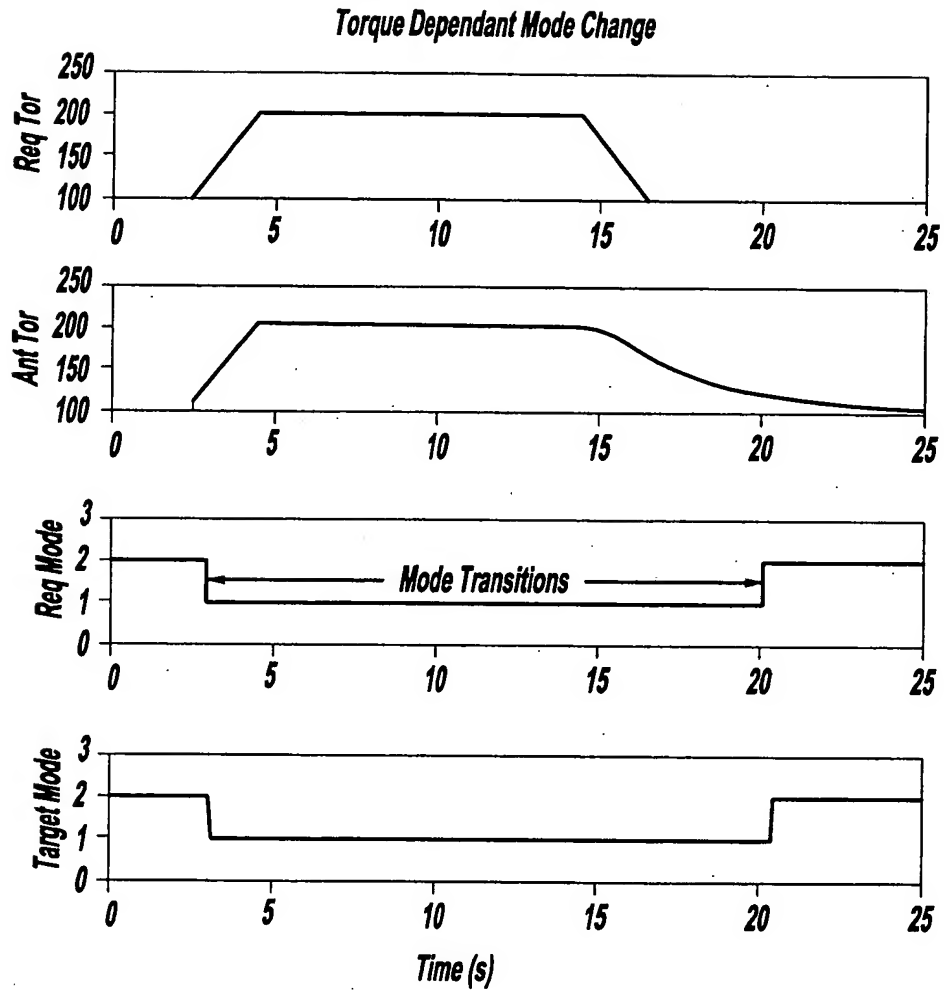


**FIG - 28**

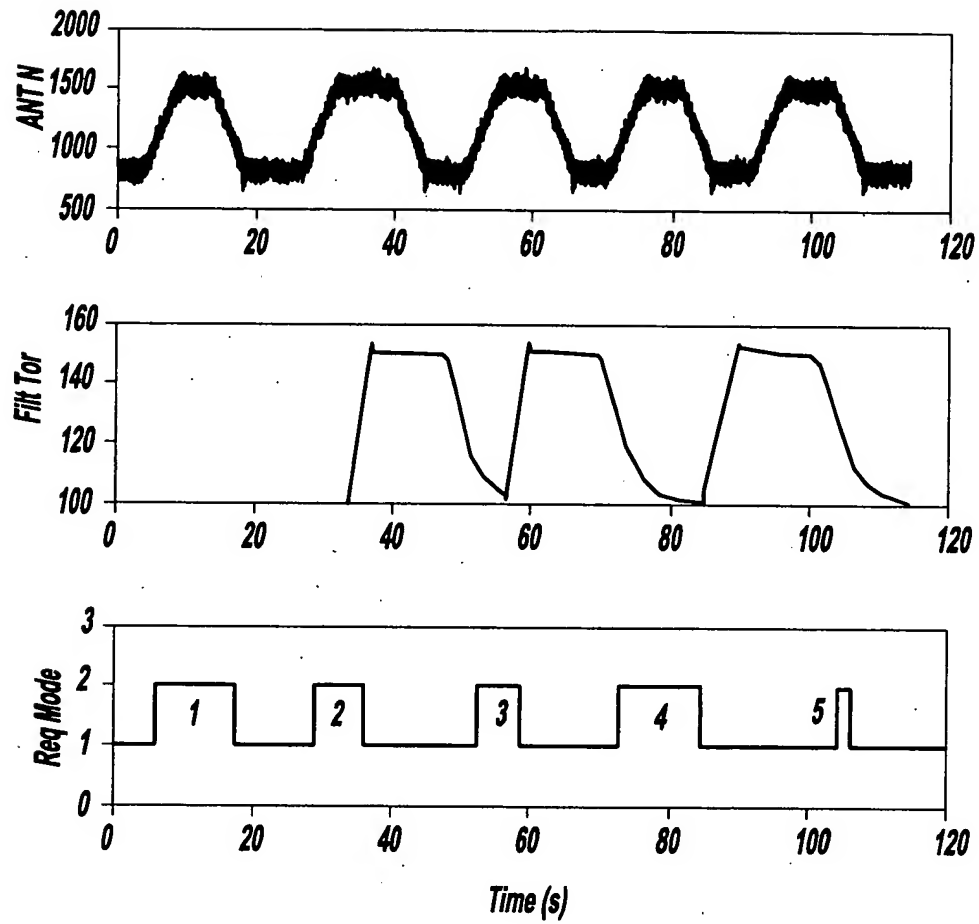


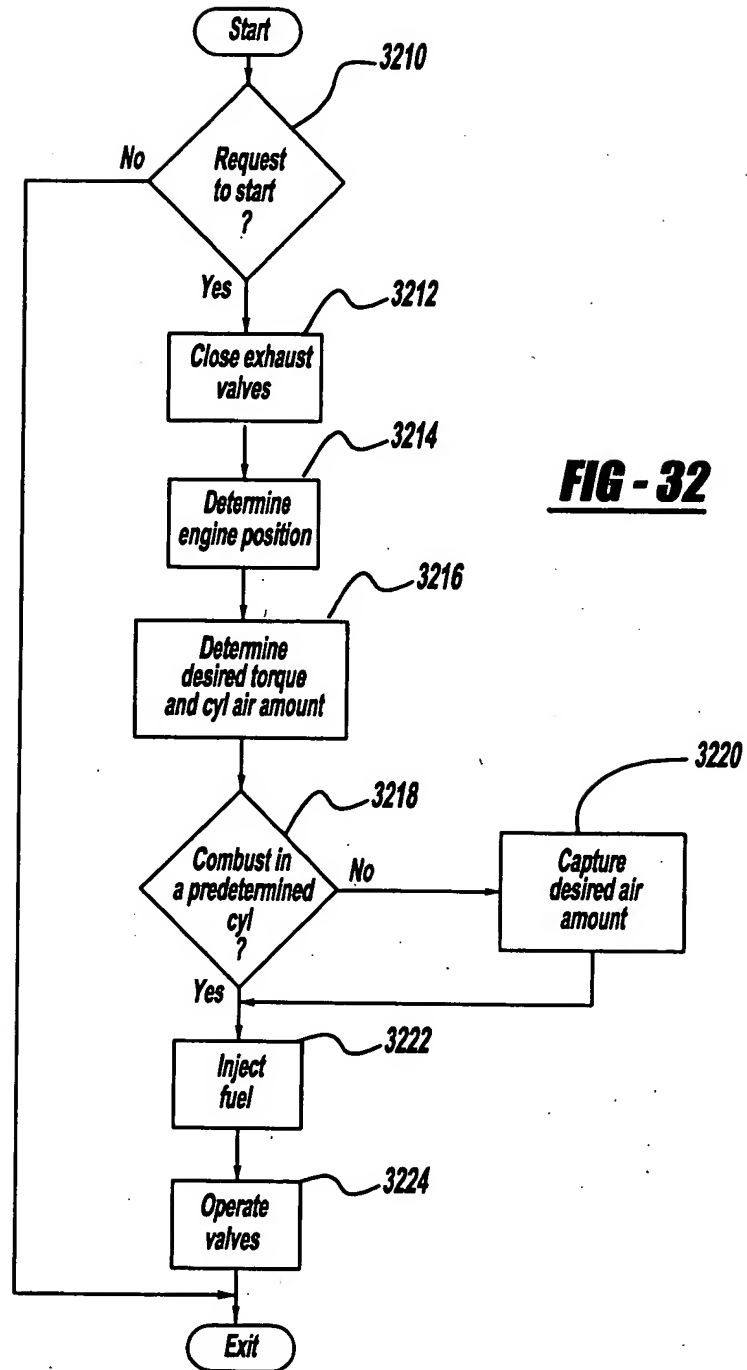
**FIG - 29**

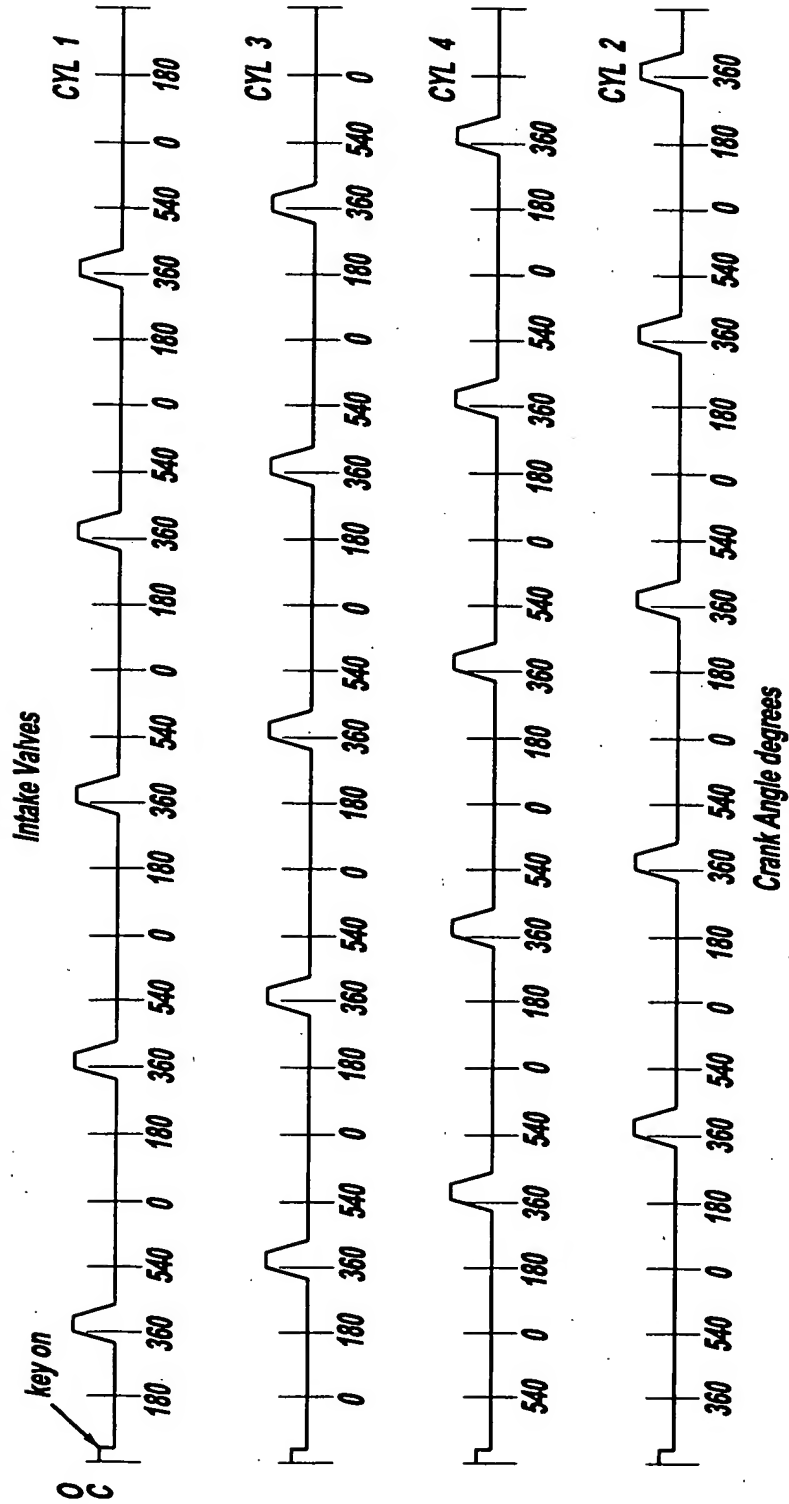
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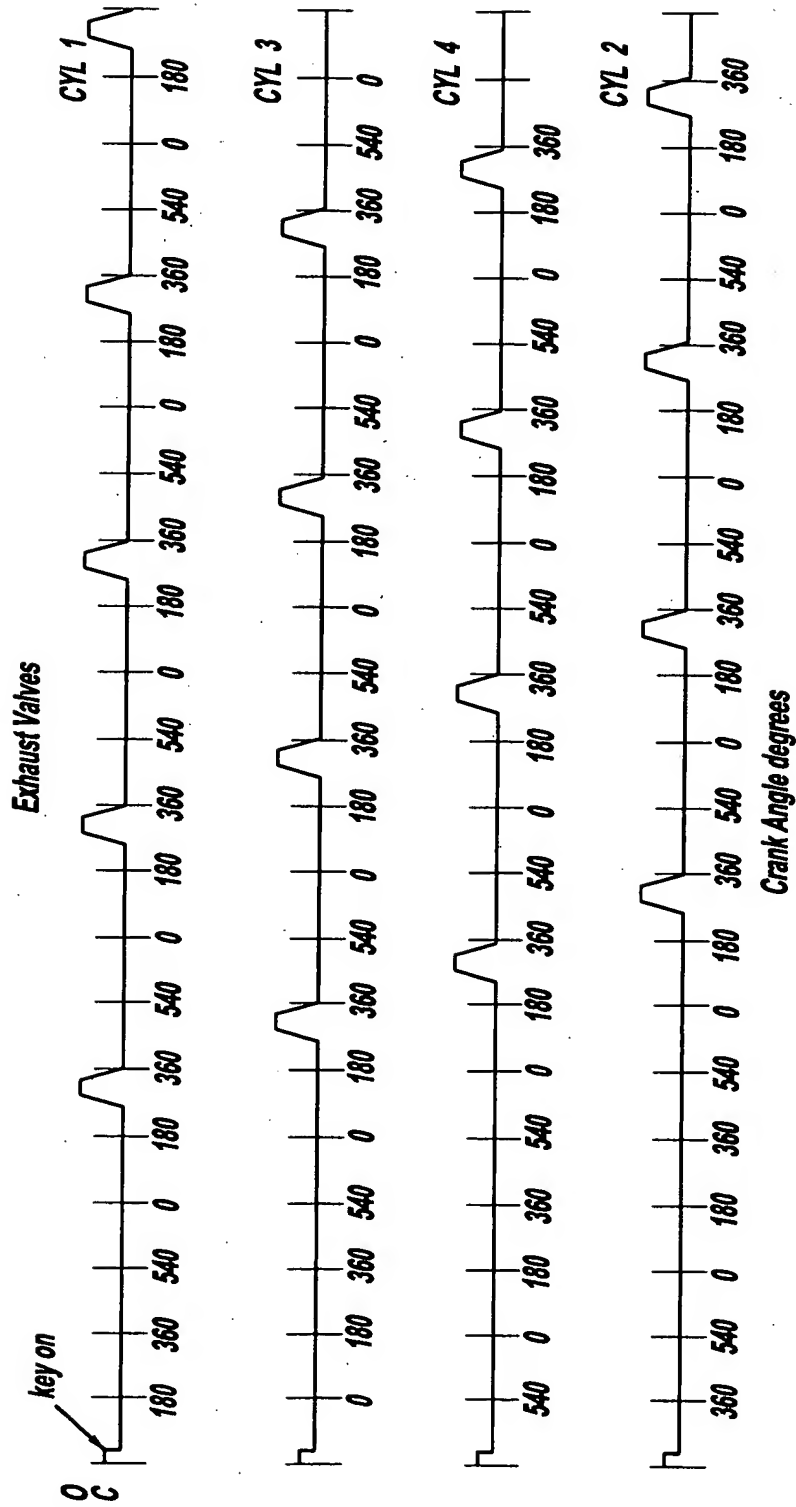
**FIG - 30**

*Speed and Torque Dependant Mode Changes***FIG - 31**

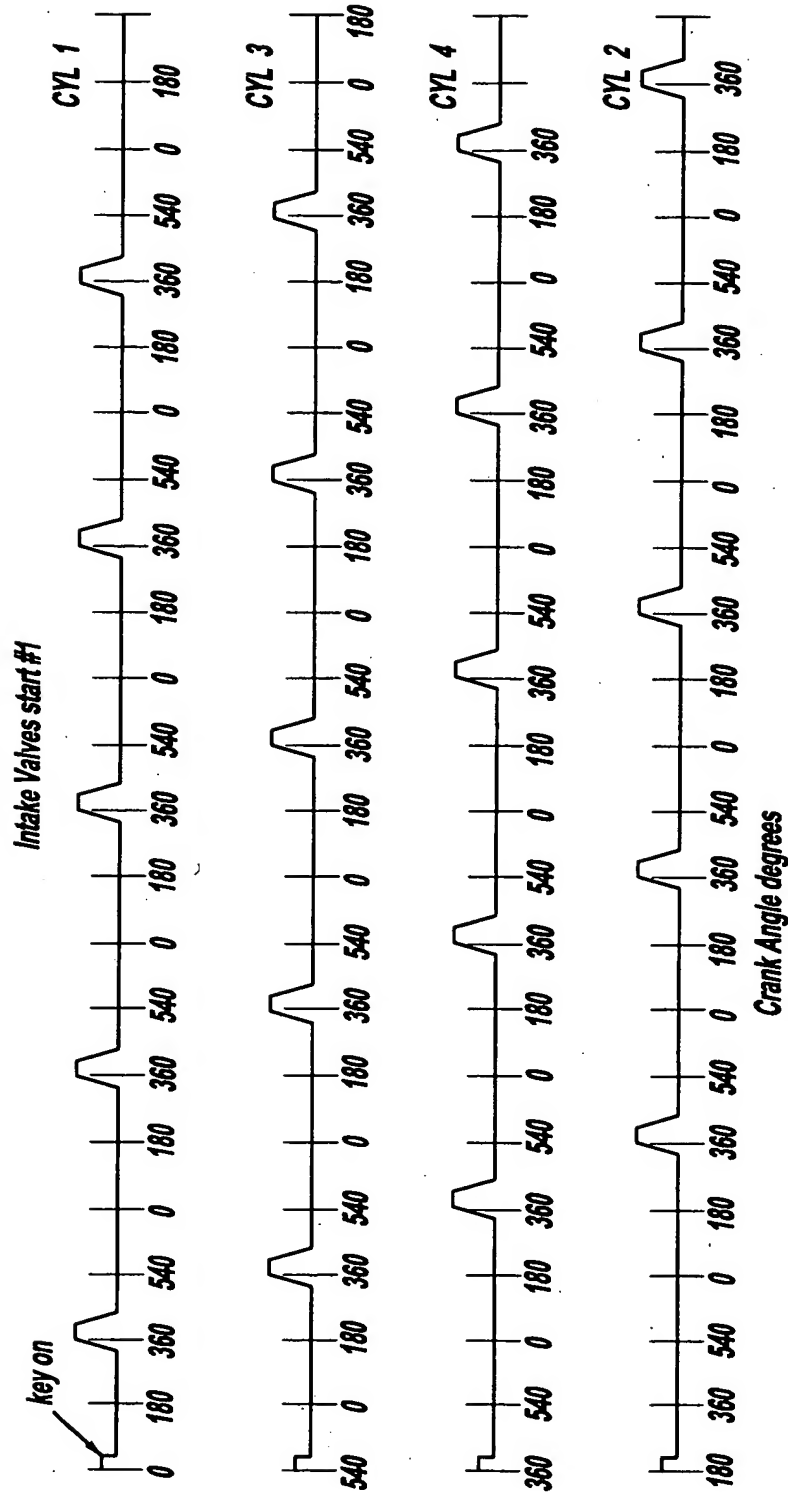




**FIG - 33a**

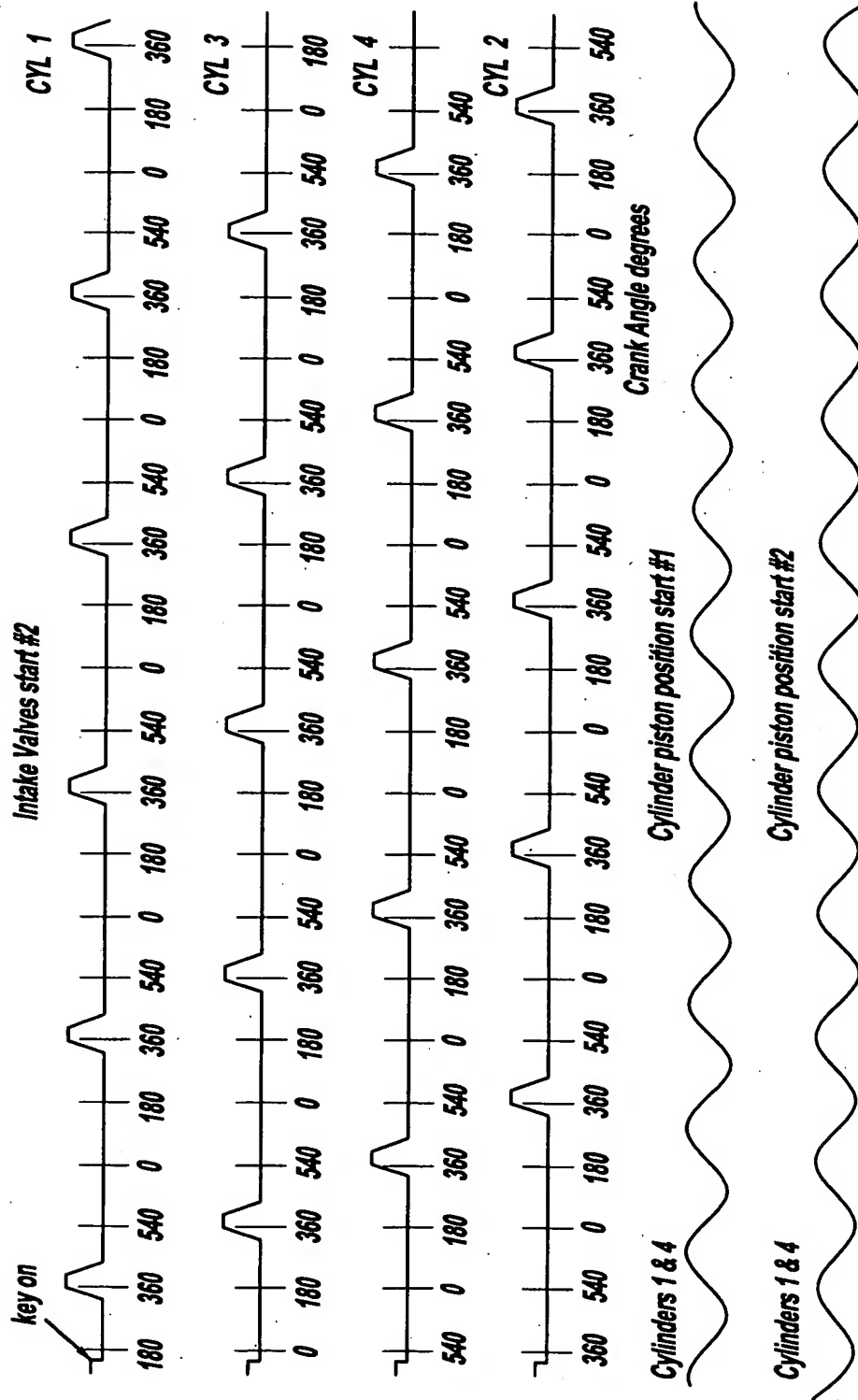


**FIG - 33b**

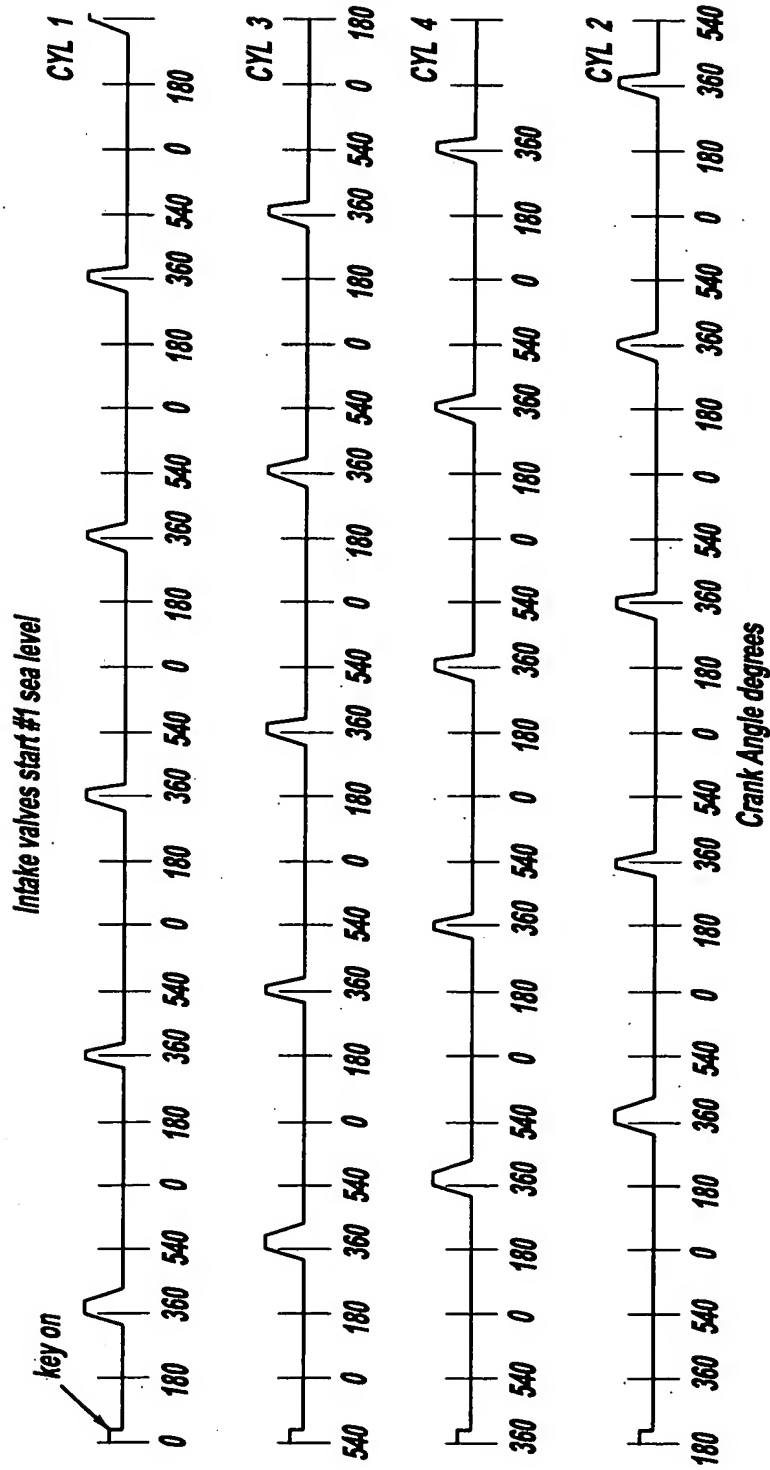


**FIG - 34a**

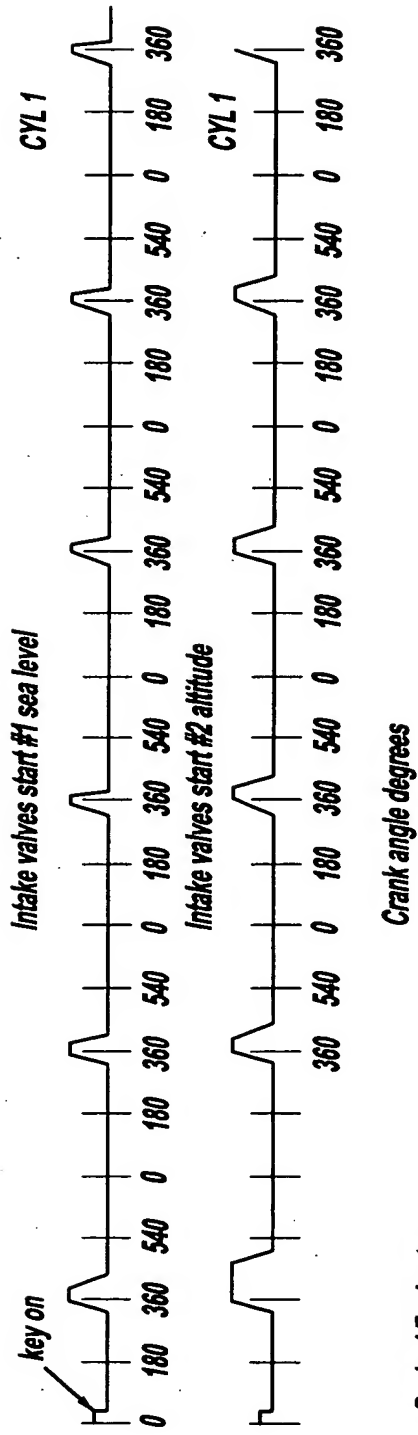




**FIG - 34b**

**FIG - 35a**

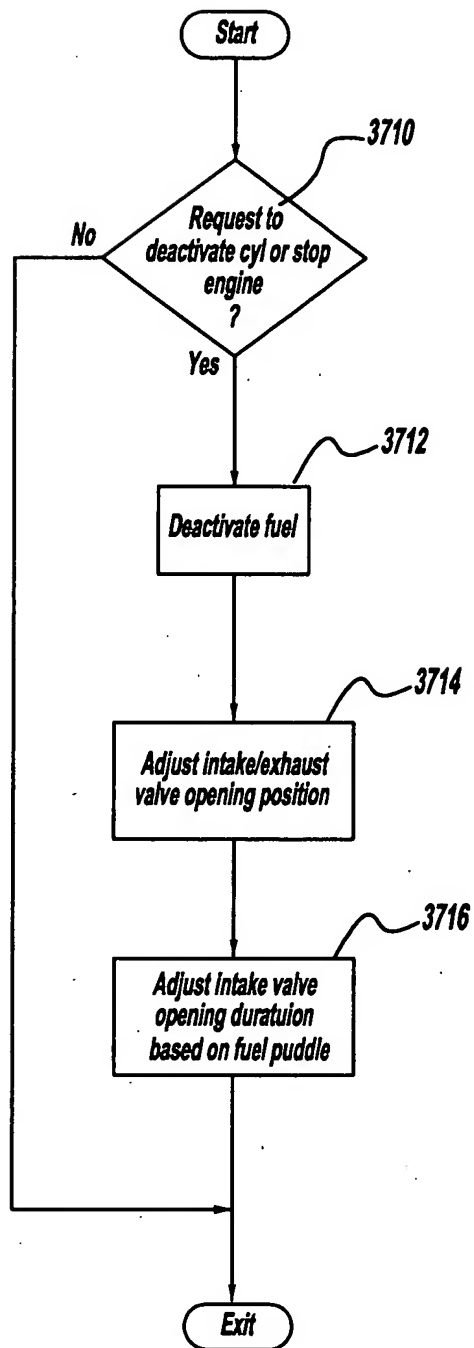


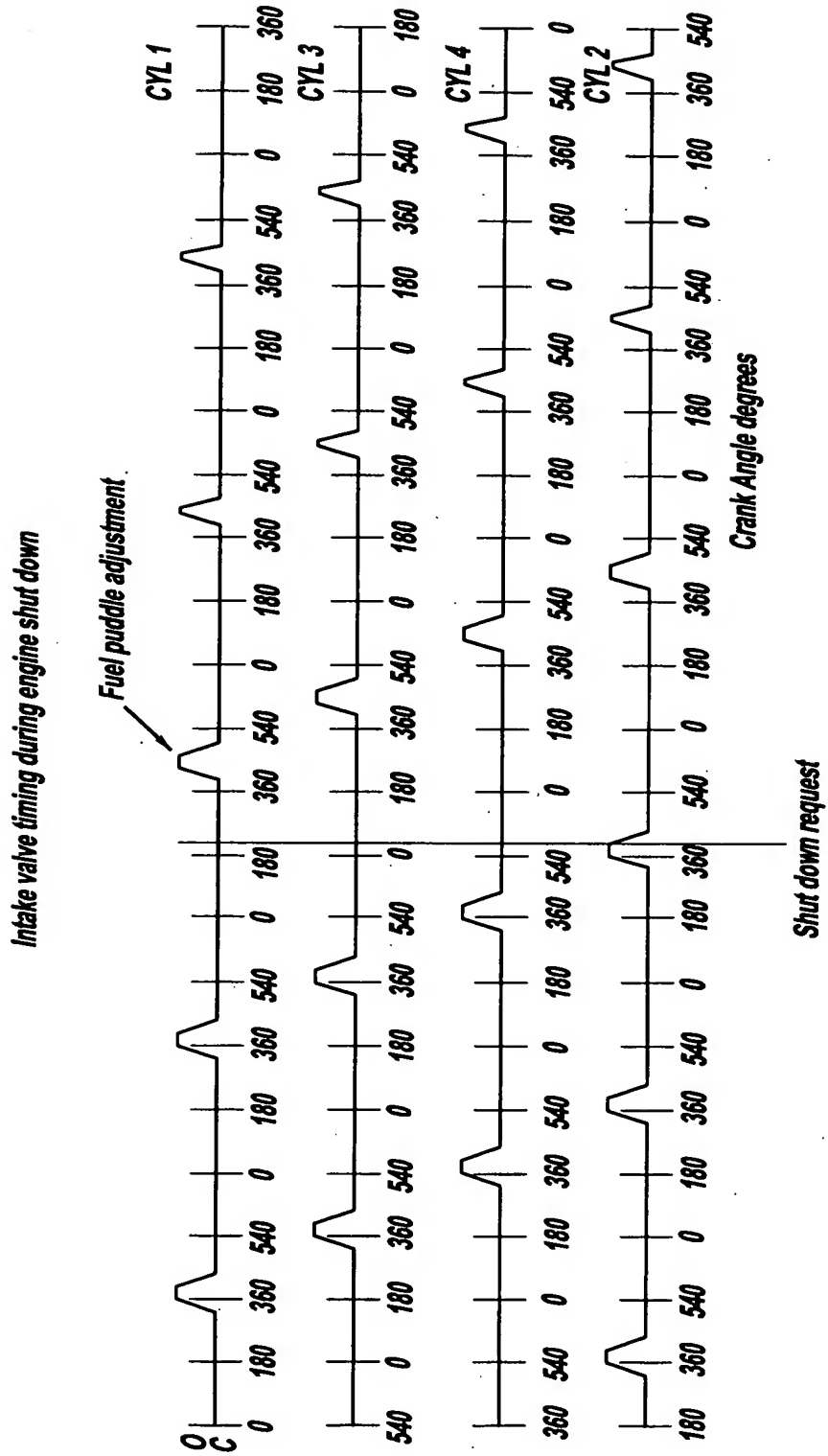


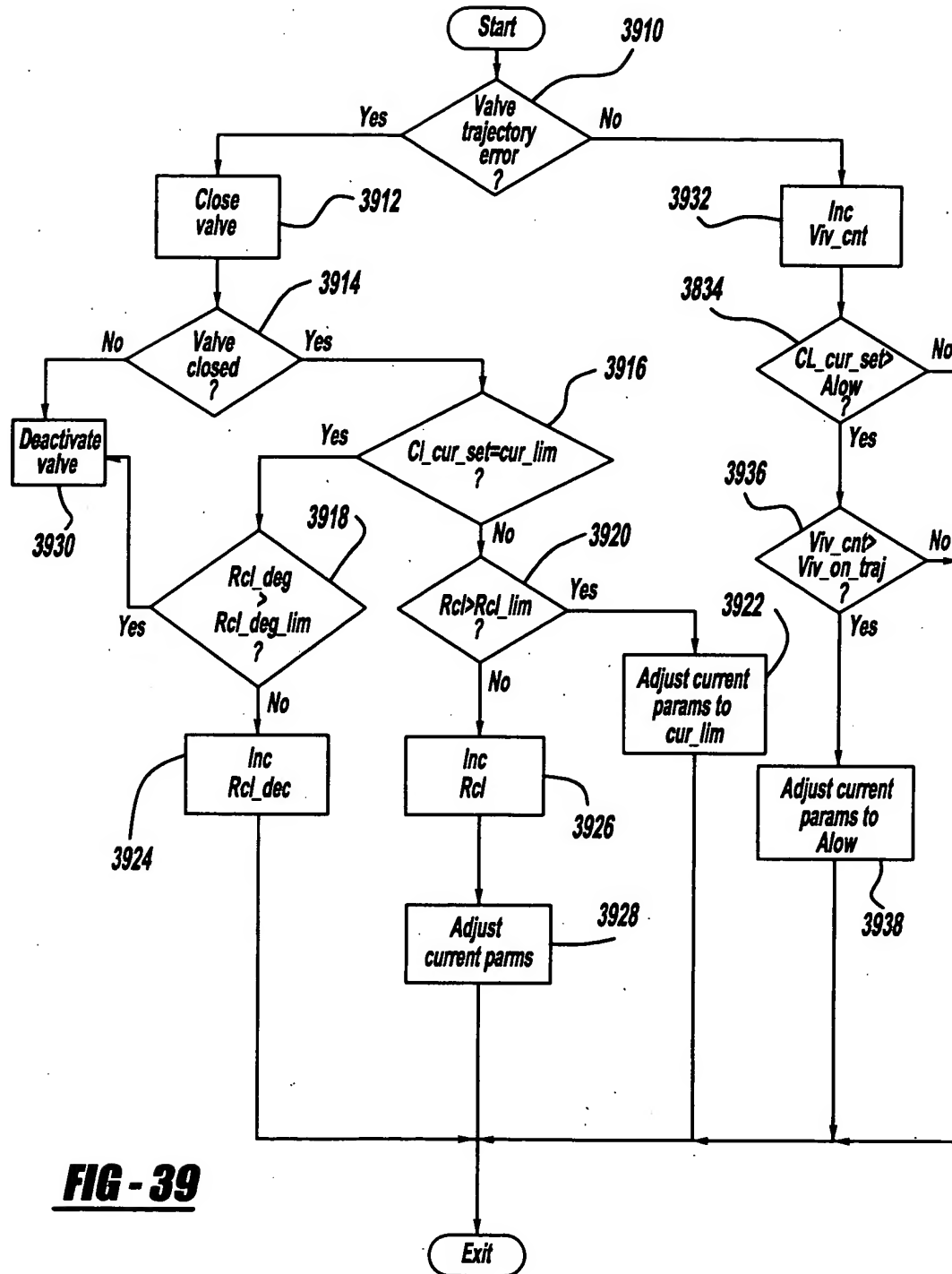
Desired Engine torque

Engine Speed

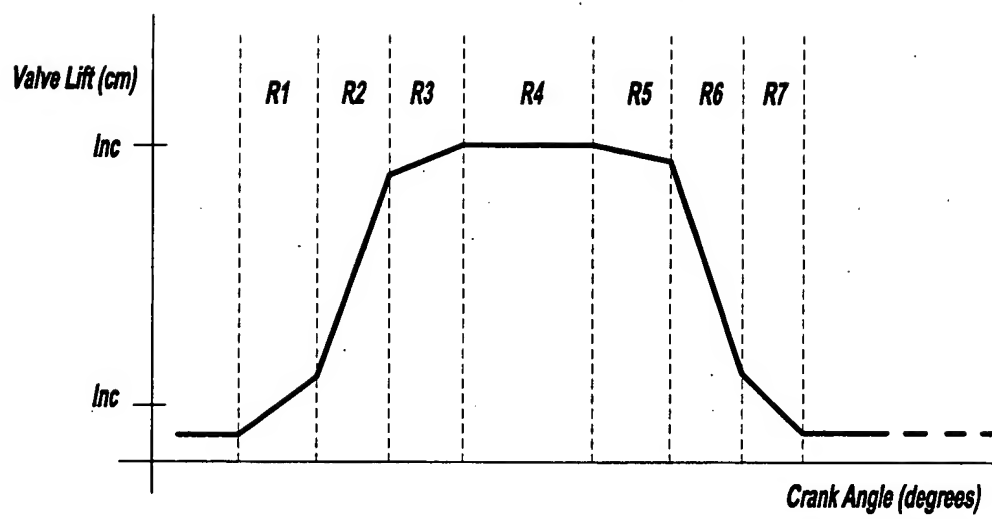
**FIG - 36**

**FIG - 37**

**FIG - 38**

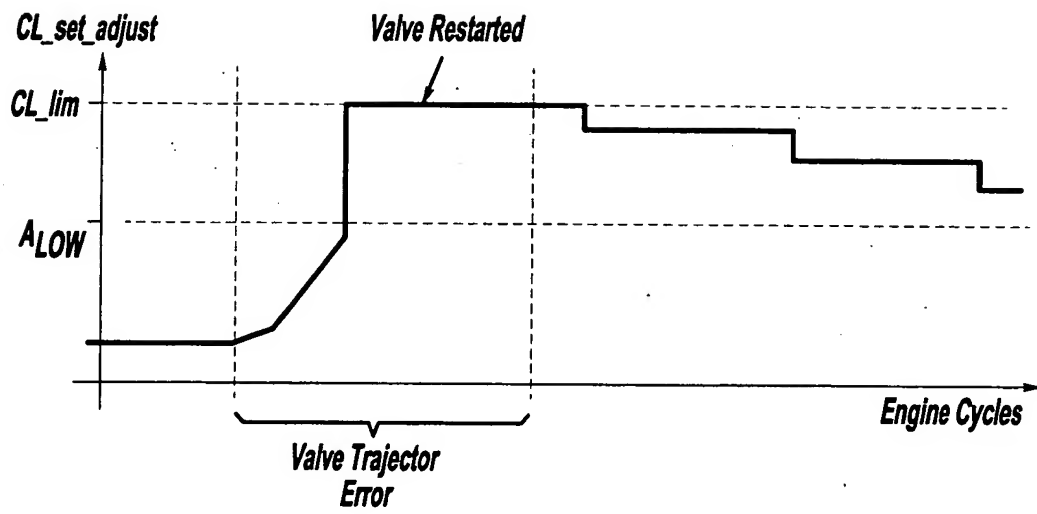


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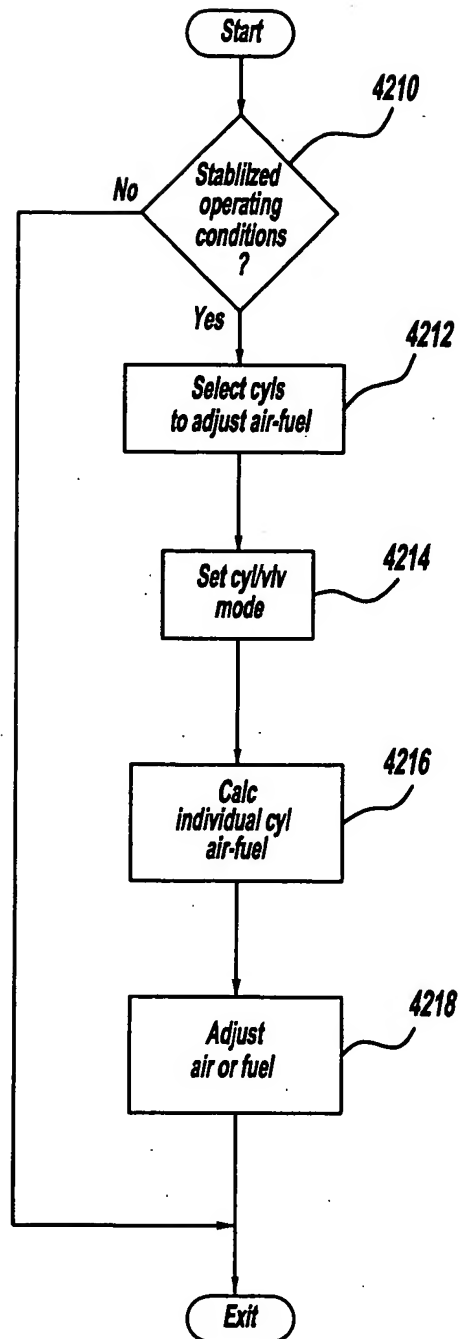


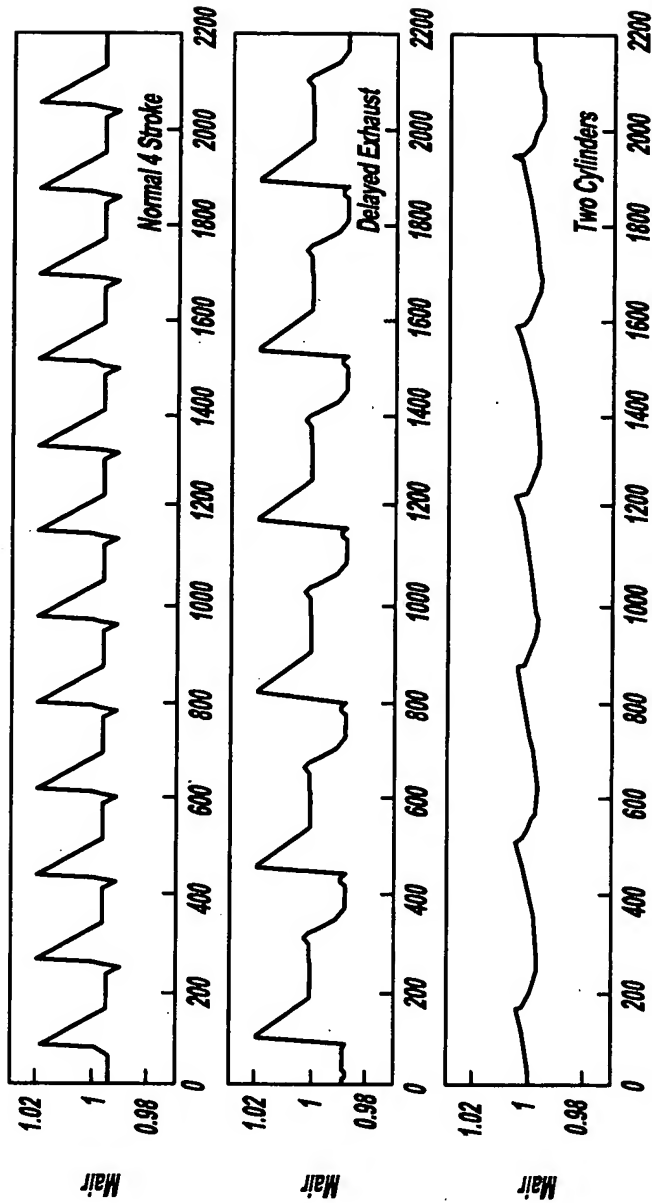
**FIG - 40**



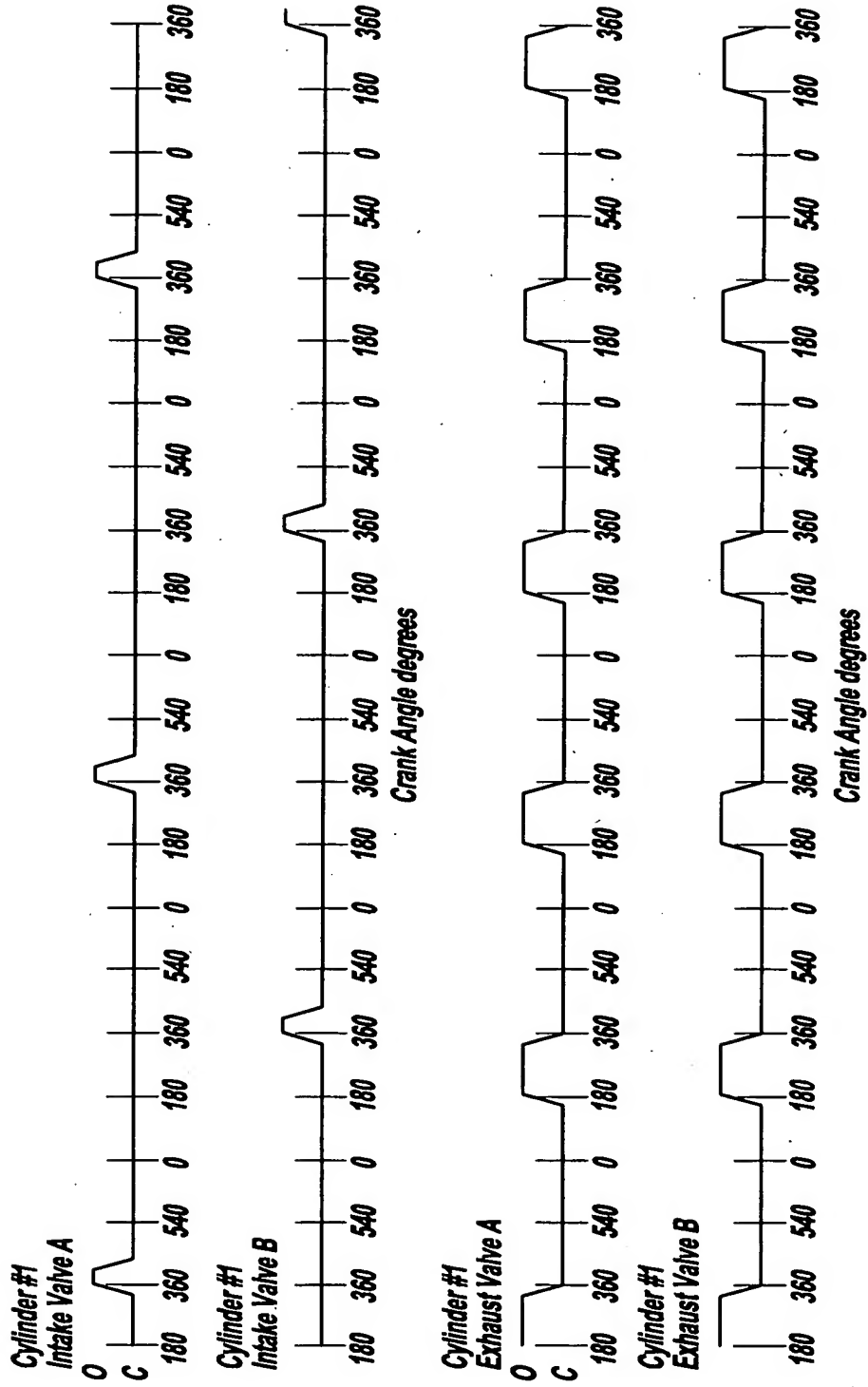


**FIG - 41**

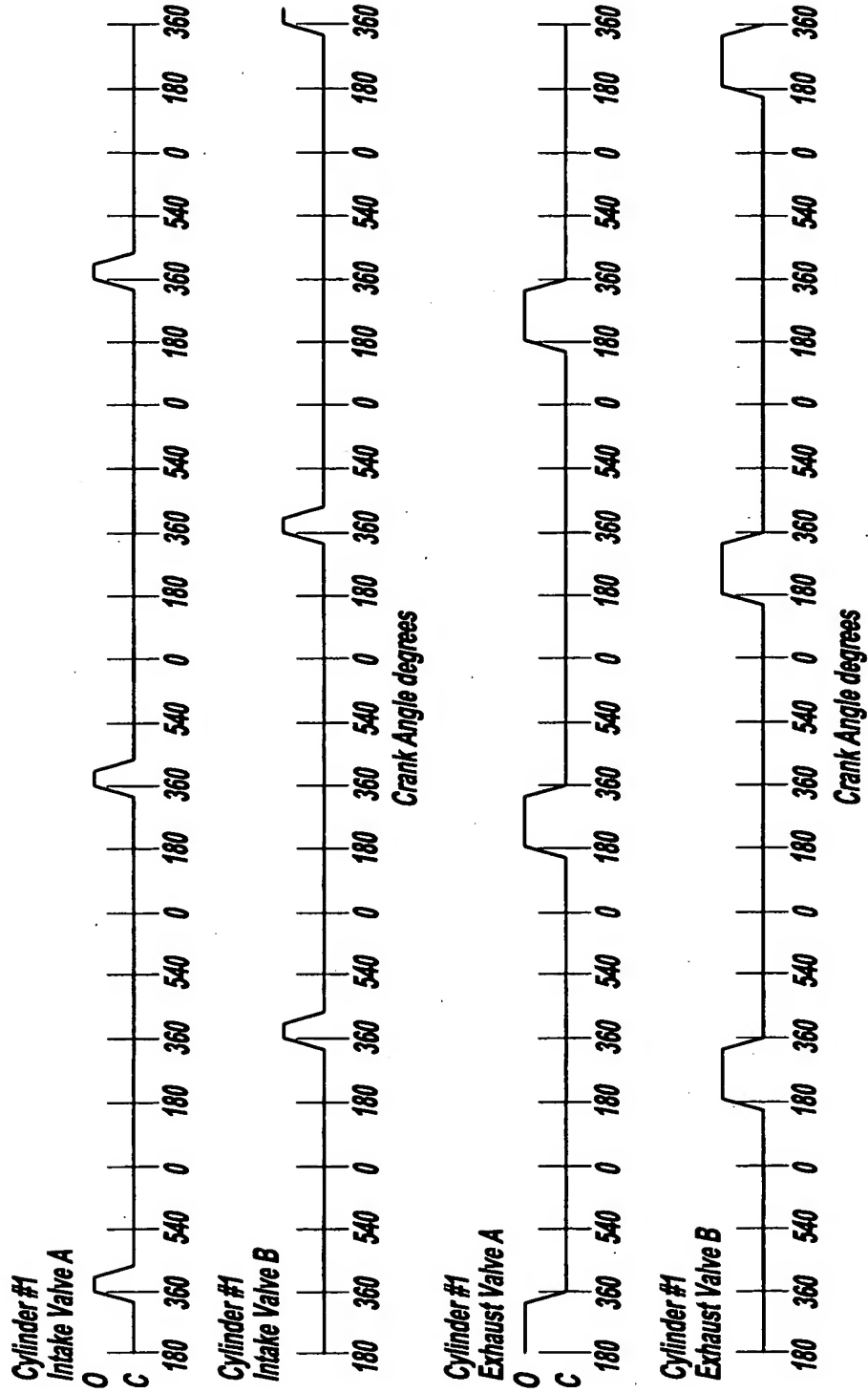
**FIG - 42**



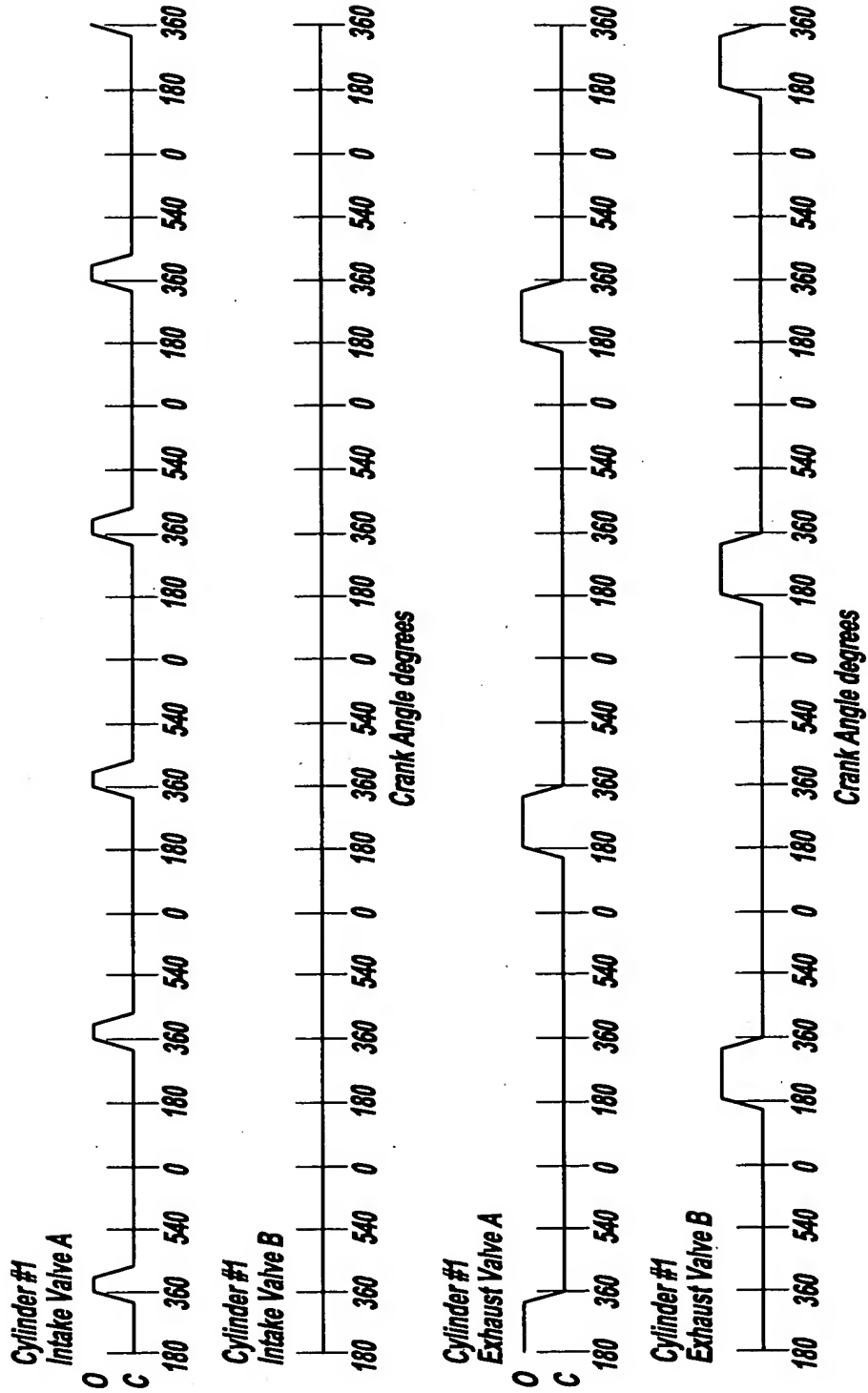
**FIG - 43**



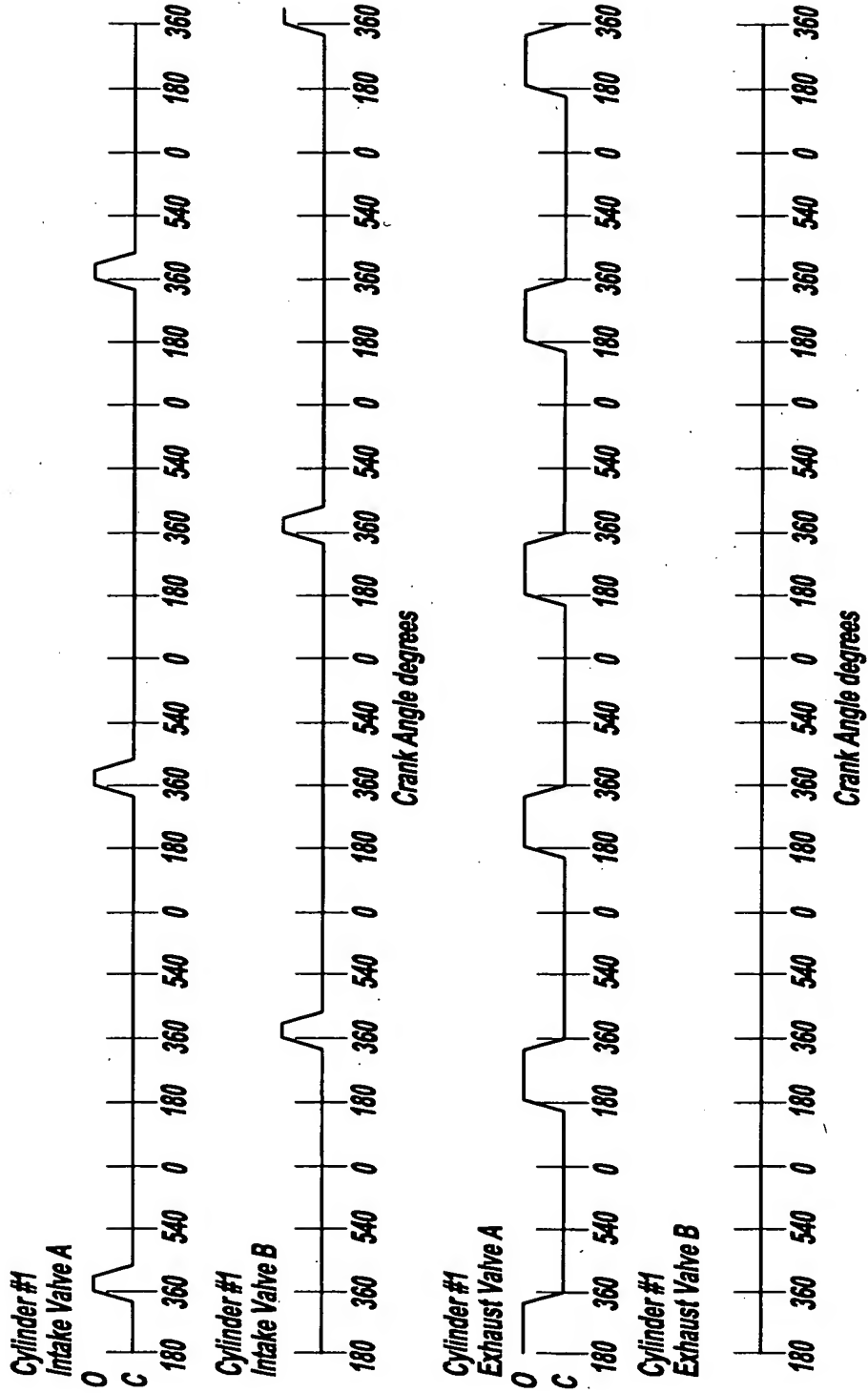
**FIG - 44**



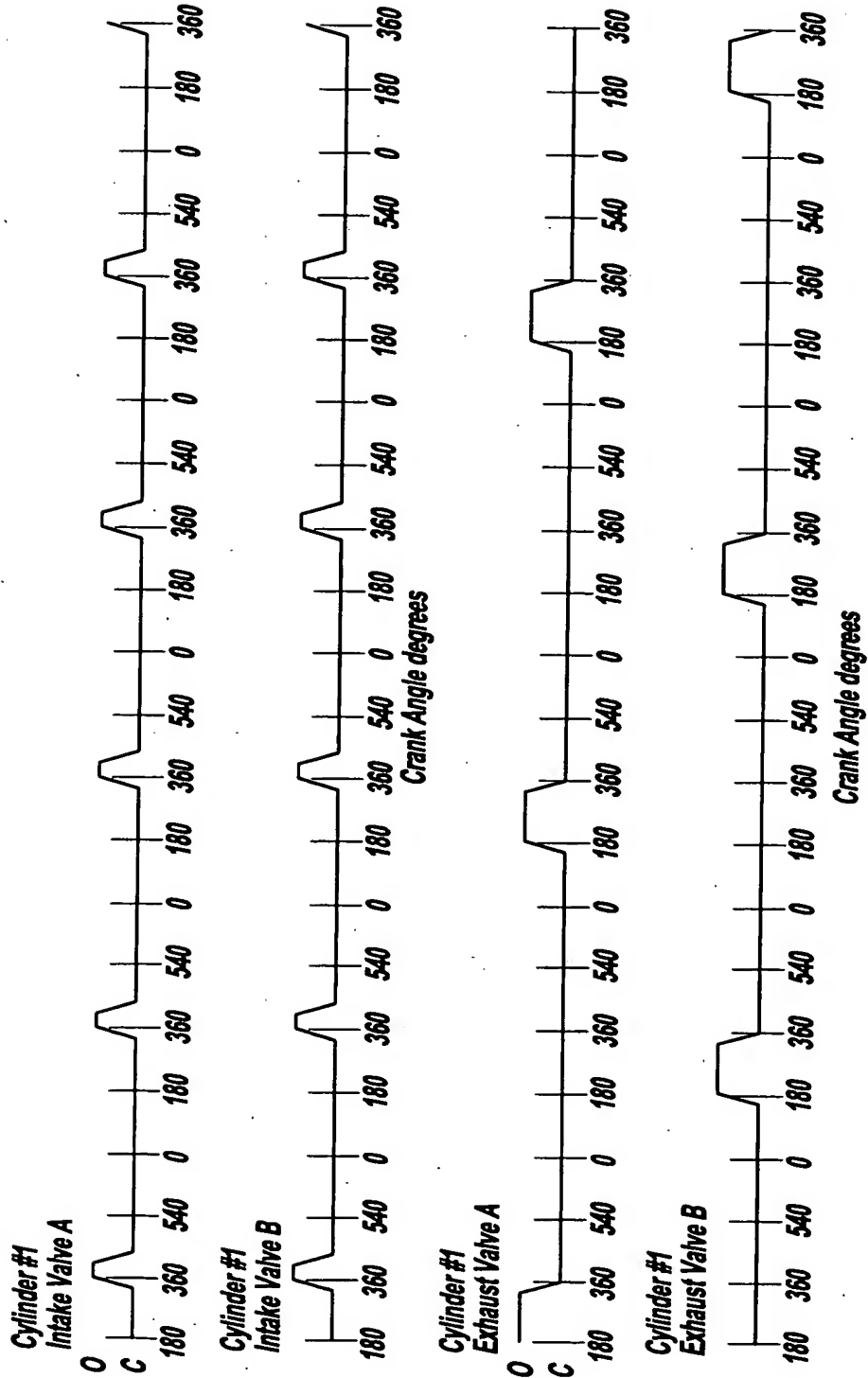
**FIG - 45**



**FIG - 46**

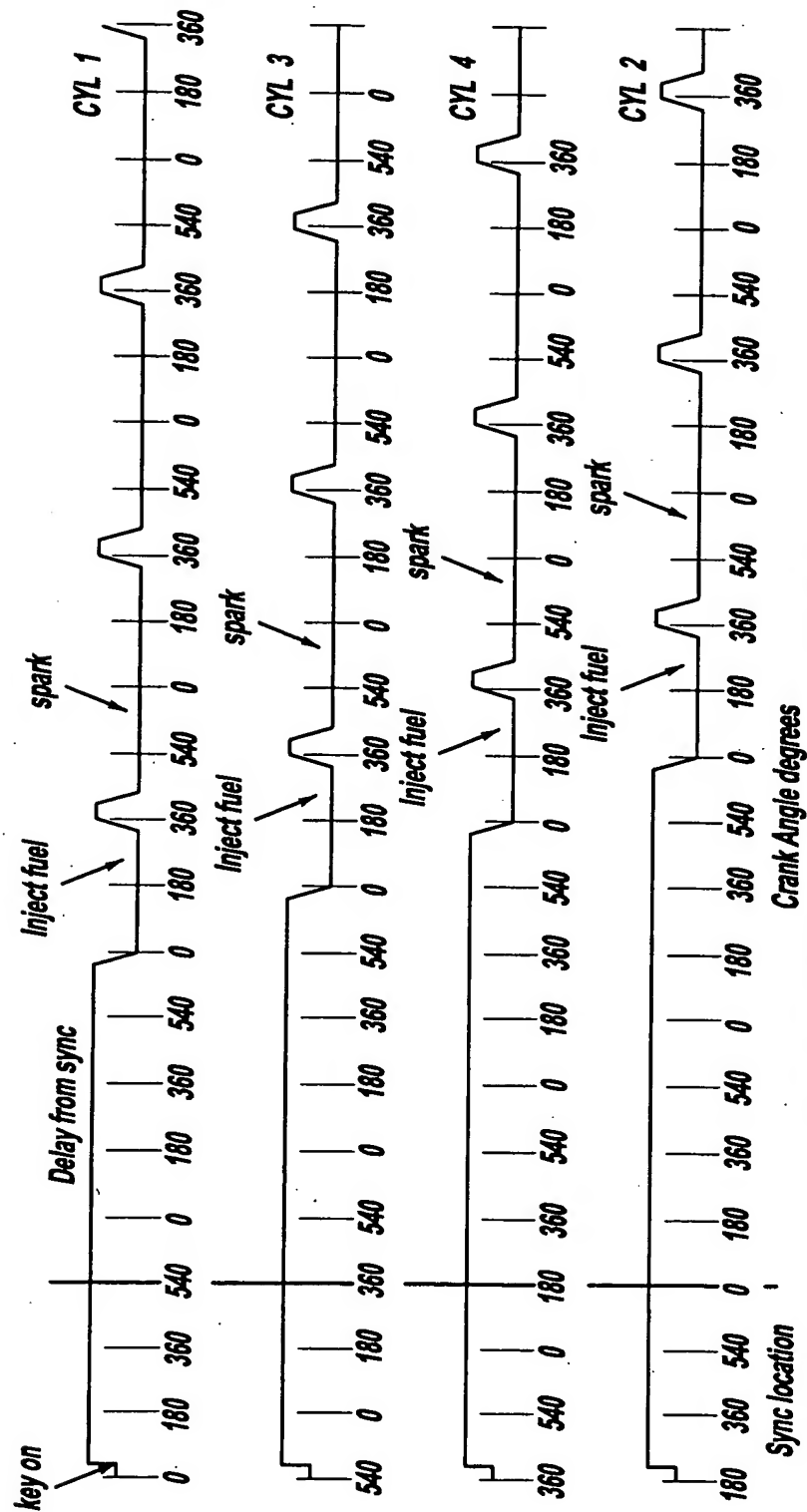


**FIG - 47**



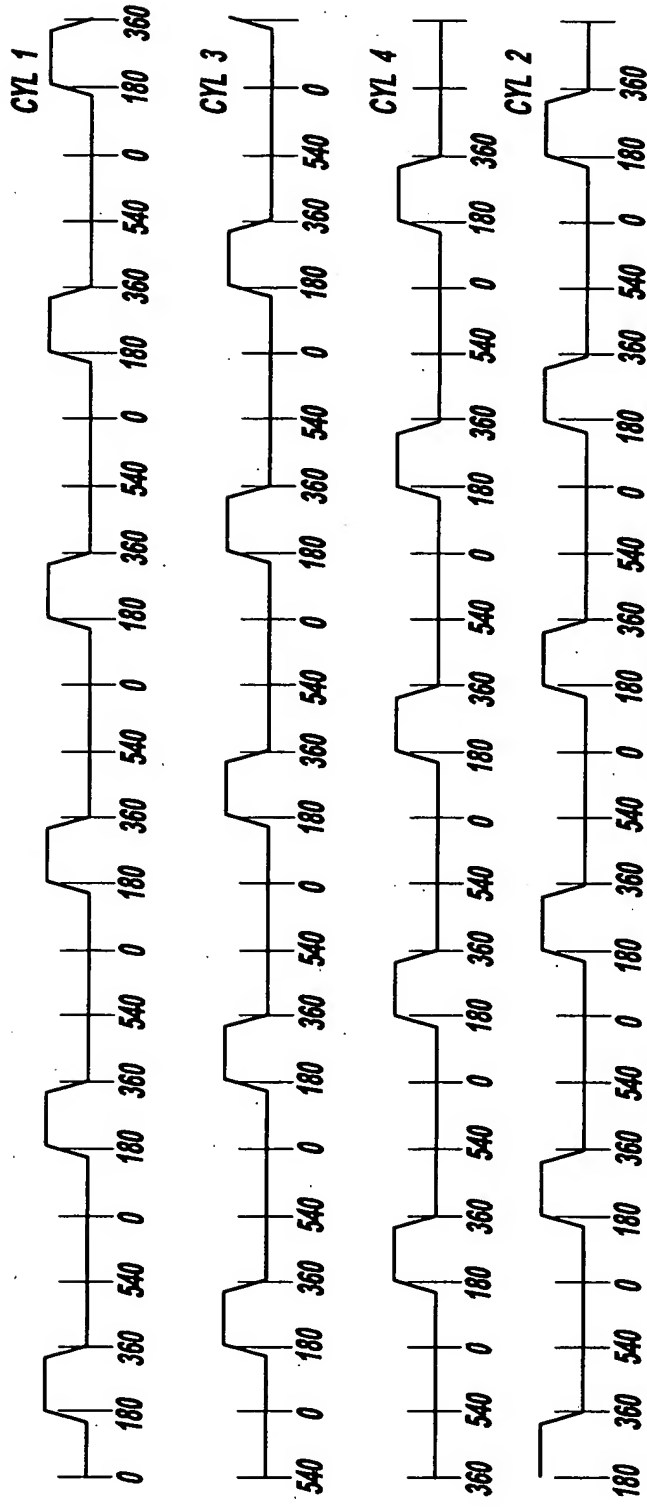
**FIG - 48**





Crank Angle degrees  
Intake Valve Timing From Start (electrical valve operation)

**FIG - 49a**

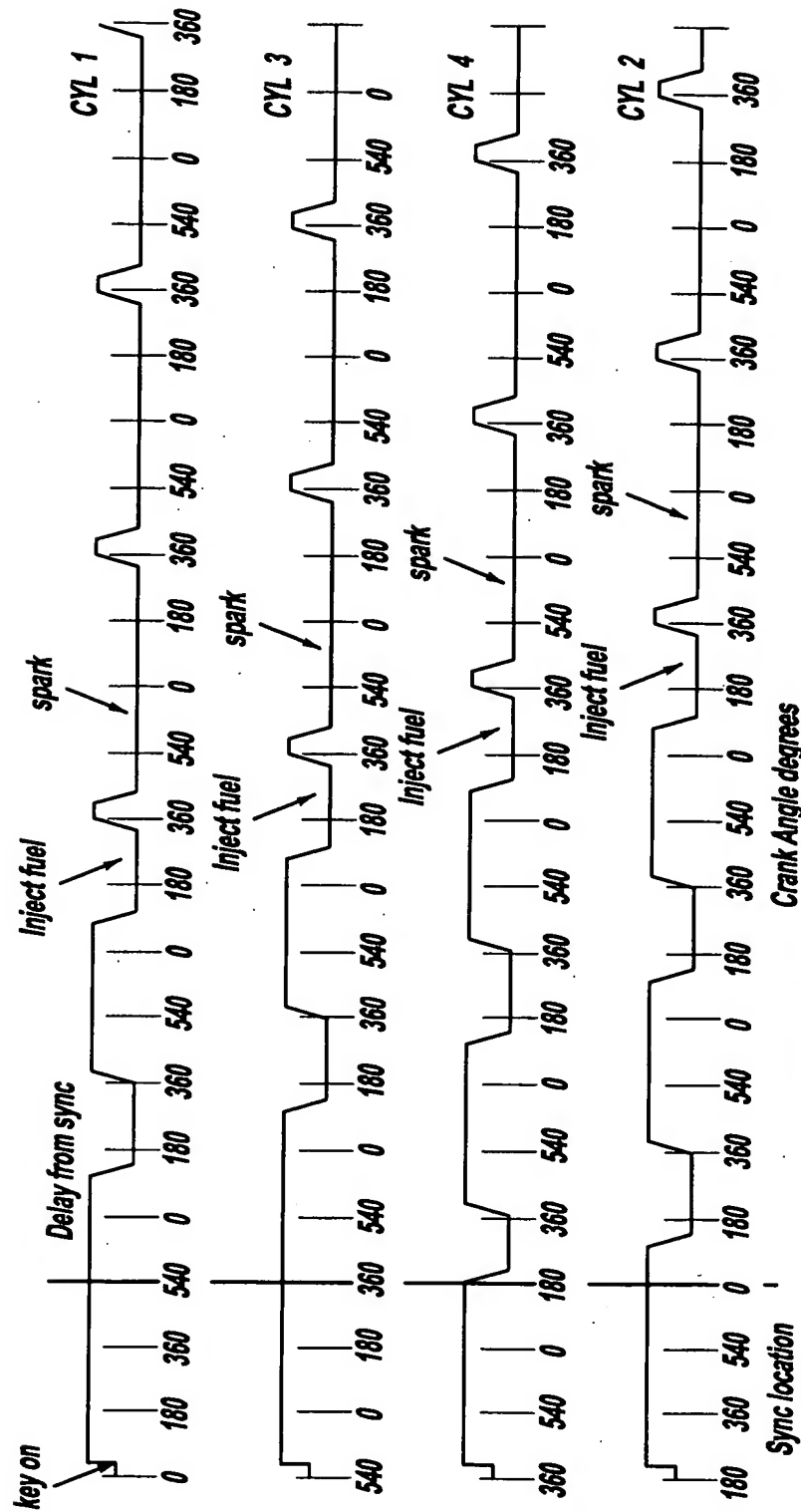


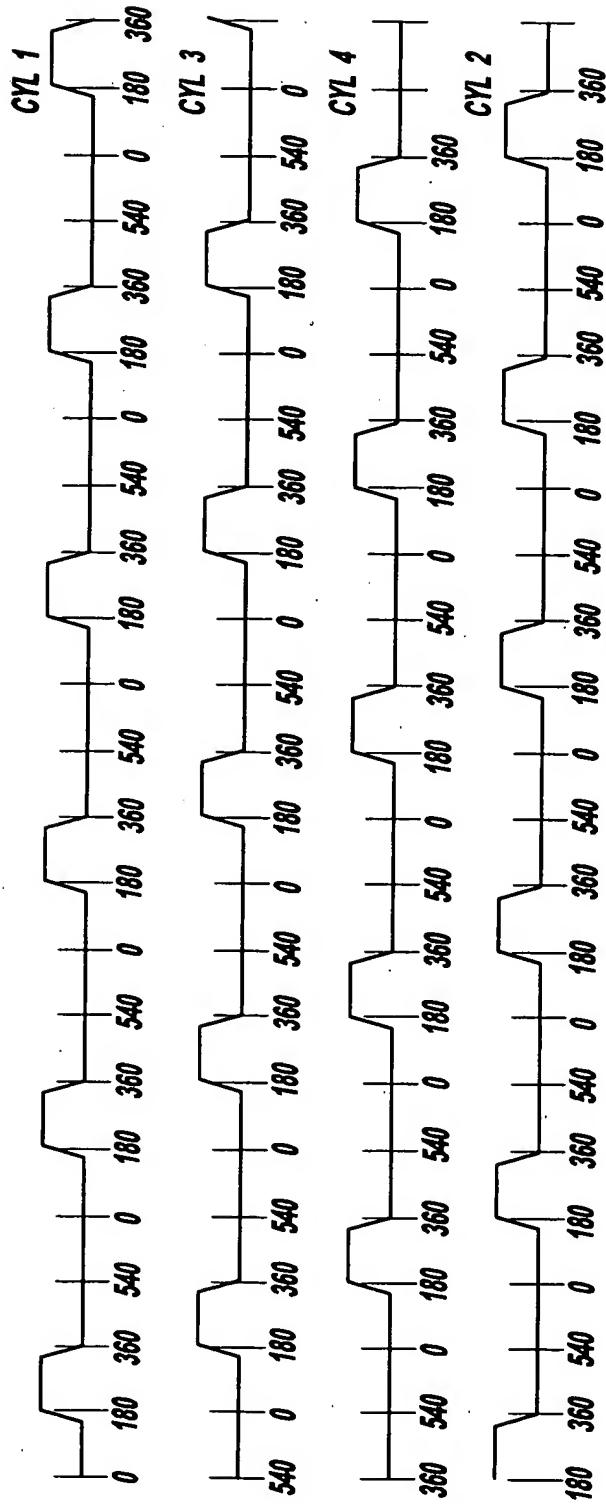
Crank Angle degrees  
Exhaust Valve Timing From Start (mechanical valve operation)

Cylinder piston position cyl 1 & 4

Cylinders 2 & 3

**FIG - 49b**

**FIG - 50a**

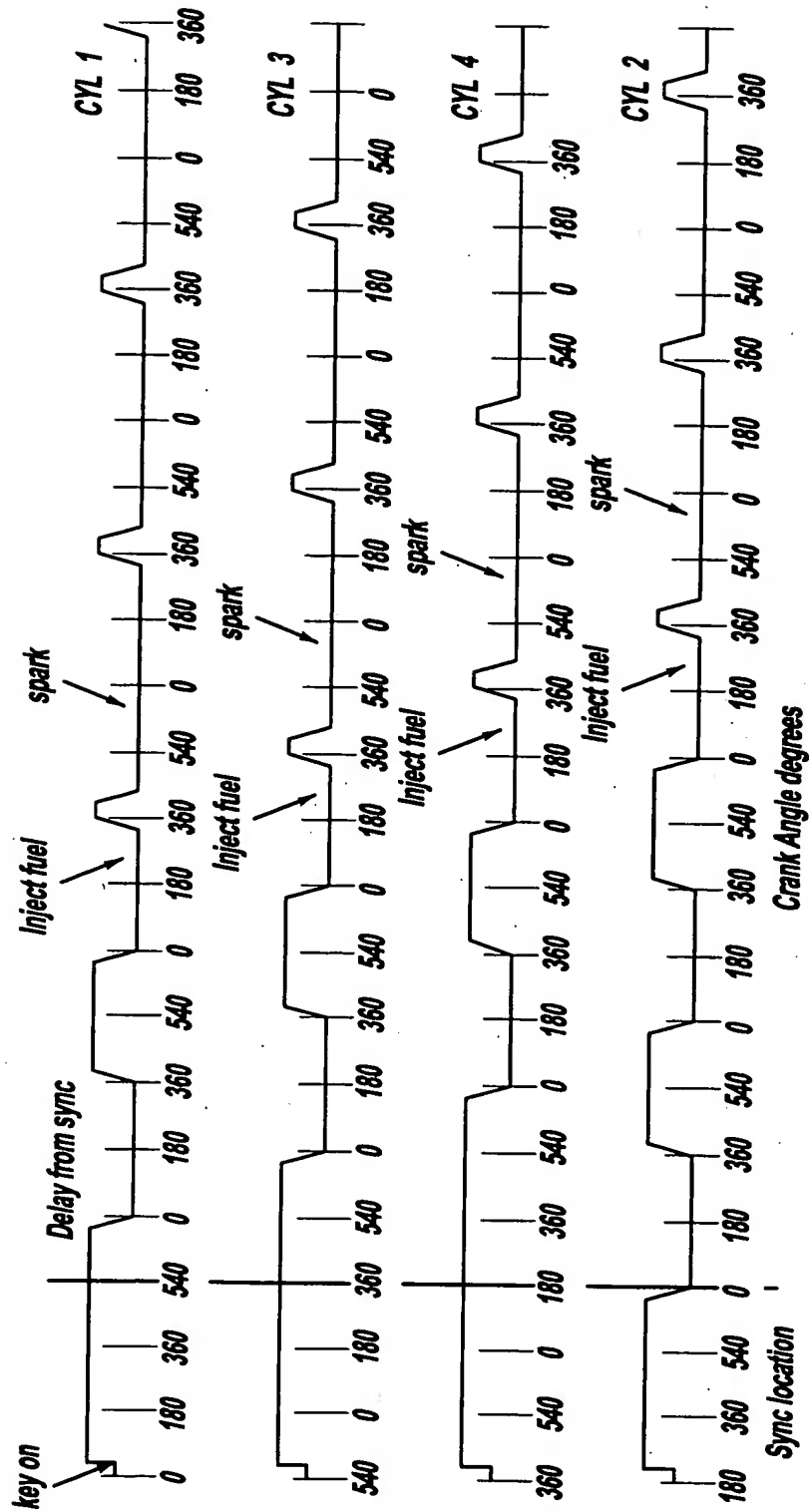


Crank Angle degrees  
Exhaust Valve Timing From Start (mechanical valve operation)

Cylinder piston position cyl 1 & 4

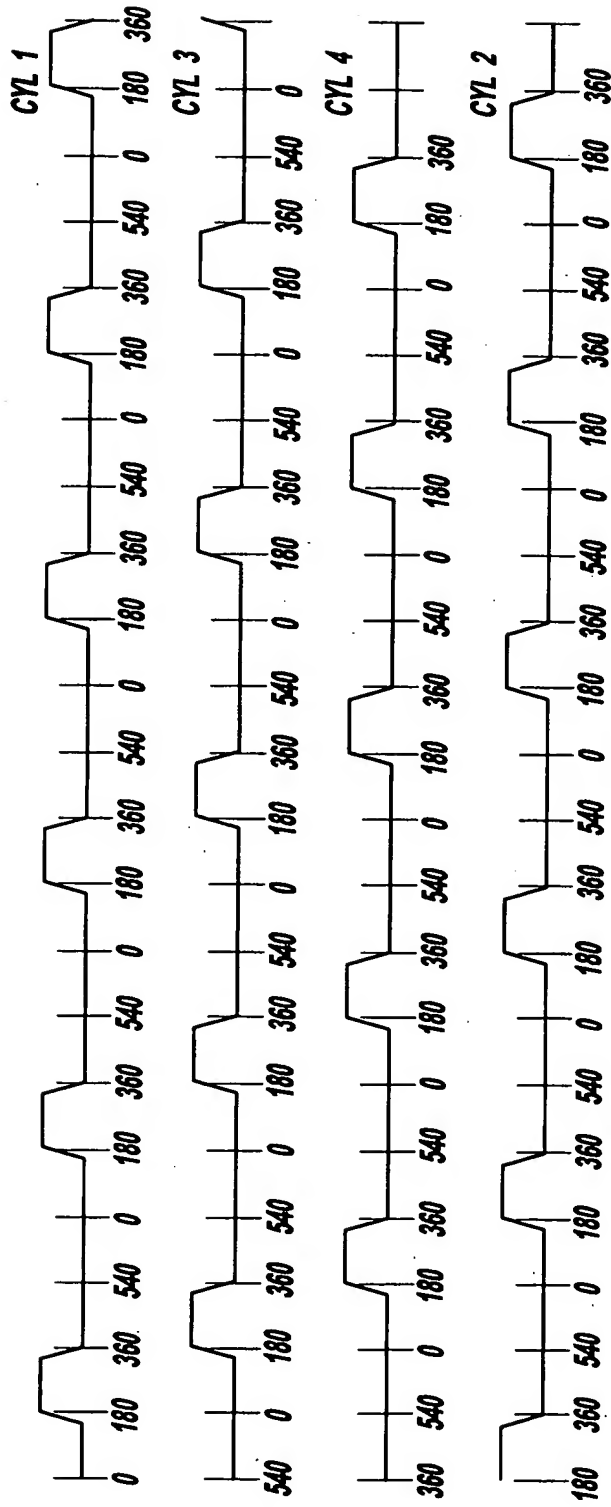
Cylinders 2 & 3

**FIG - 50b**



Crank Angle degrees  
Intake Valve Timing From Start (electrical valve operation)

**FIG - 51a**



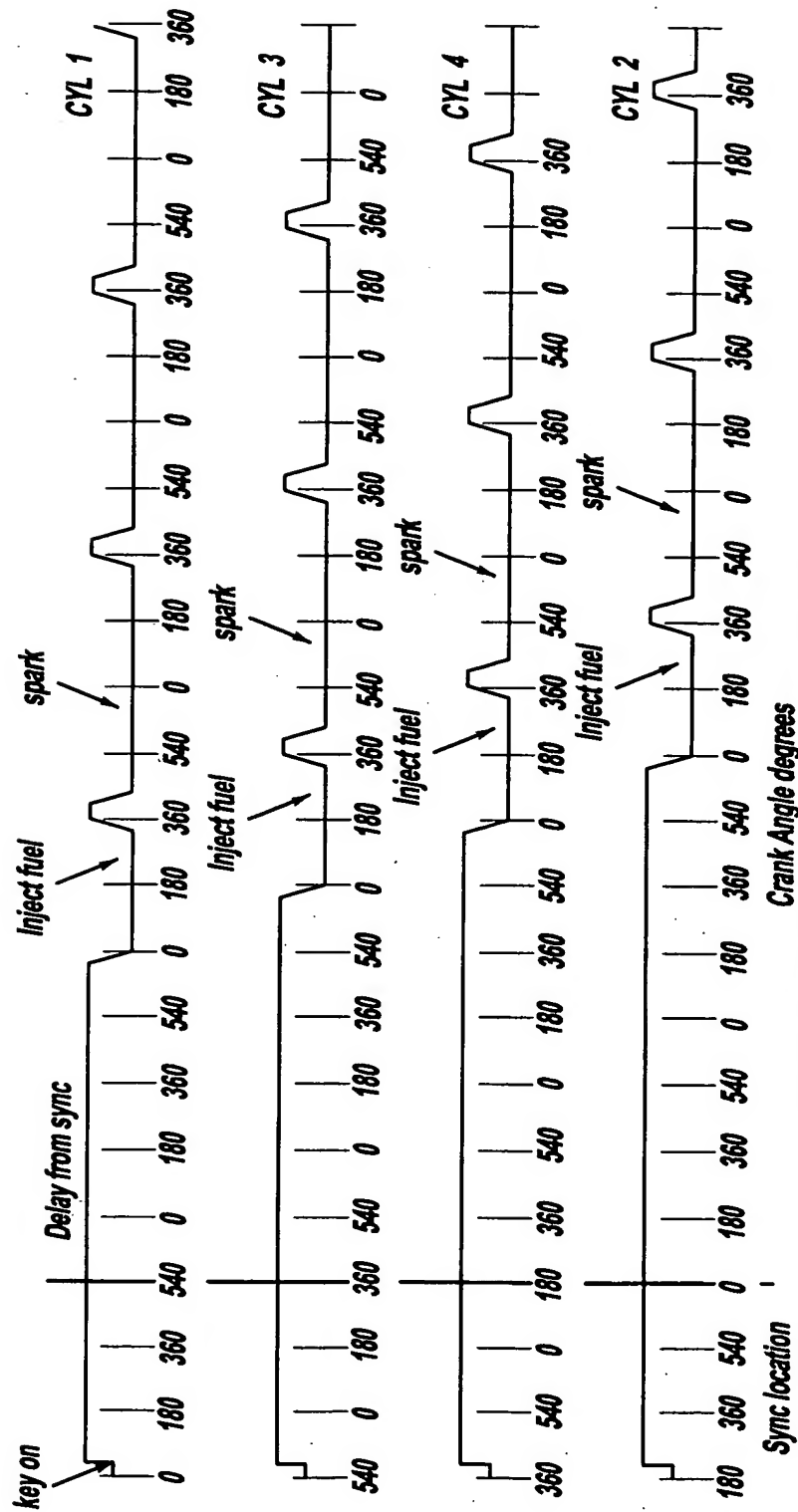
Crank Angle degrees

Exhaust Valve Timing From Start (mechanical valve operation)

Cylinder piston position cyl 1 & 4

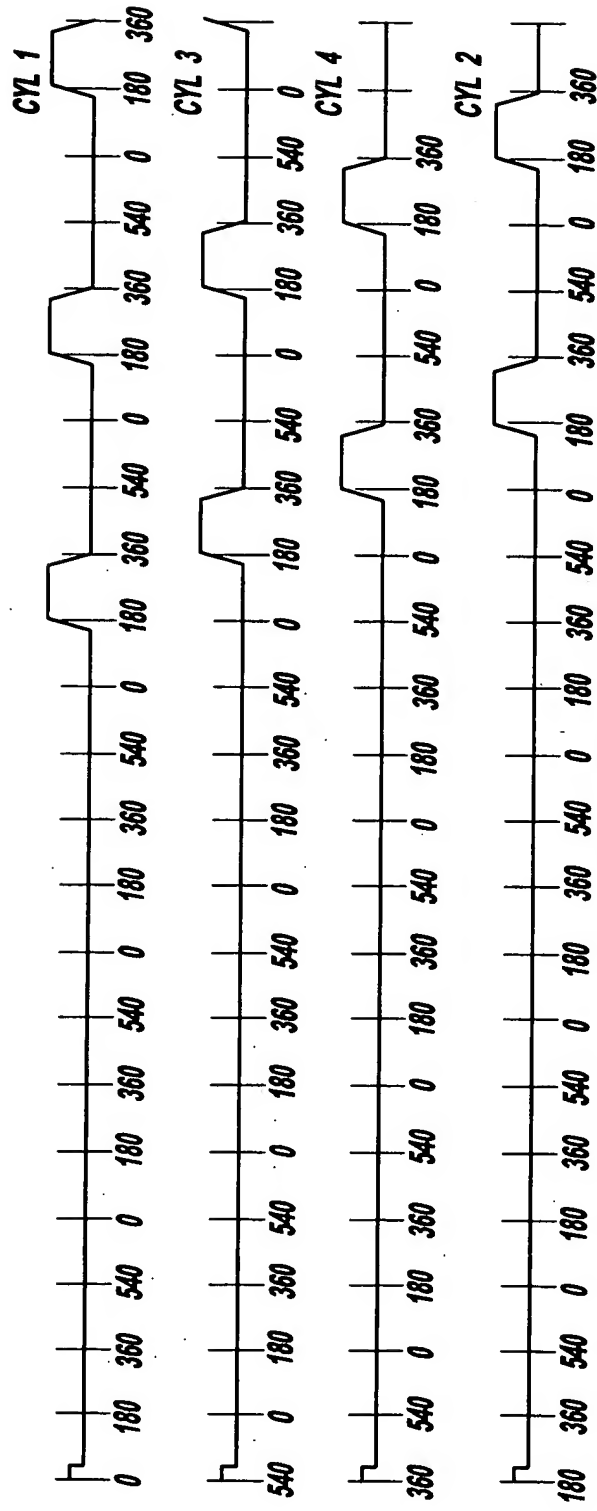
Cylinders 2 & 3

**FIG - 51b**



Intake Valve Timing From Start (electrical valve operation)

**FIG - 52a**



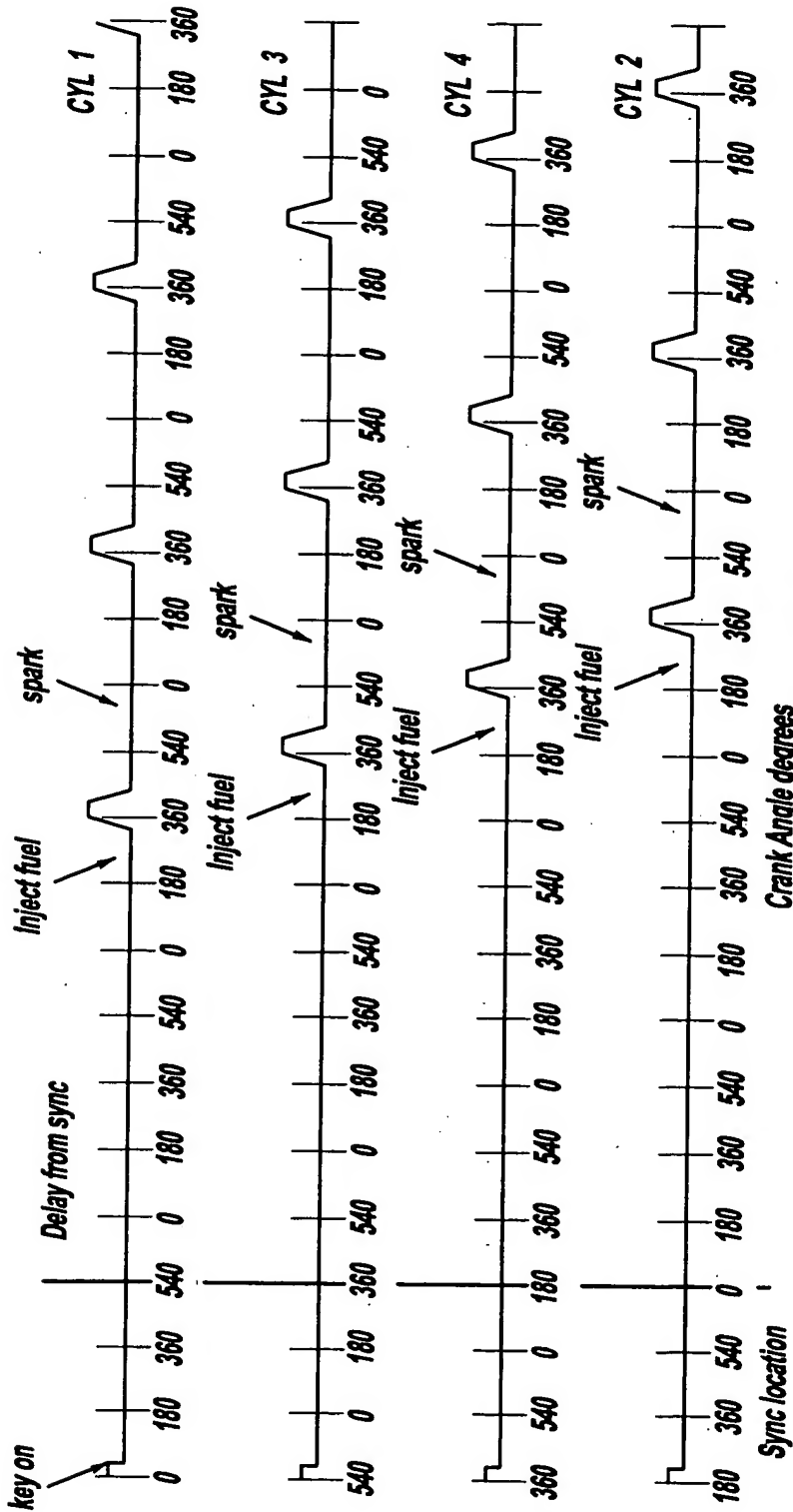
Crank Angle degrees  
Exhaust Valve Timing From Start (electrical valve operation)

Cylinder piston position cyl 1 & 4

Cylinders 2 & 3

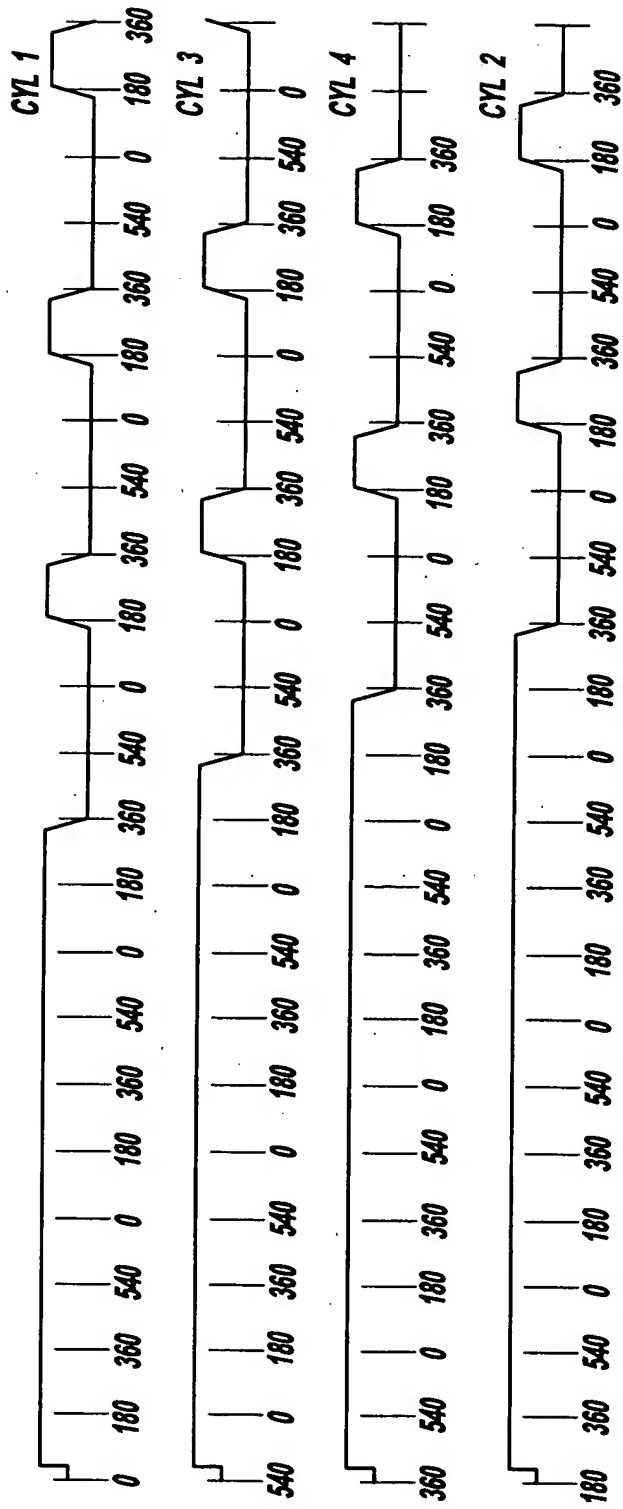
**FIG - 52b**





### ***Intake Valve Timing From Start (electrical valve operation)***

**FIG - 53a**



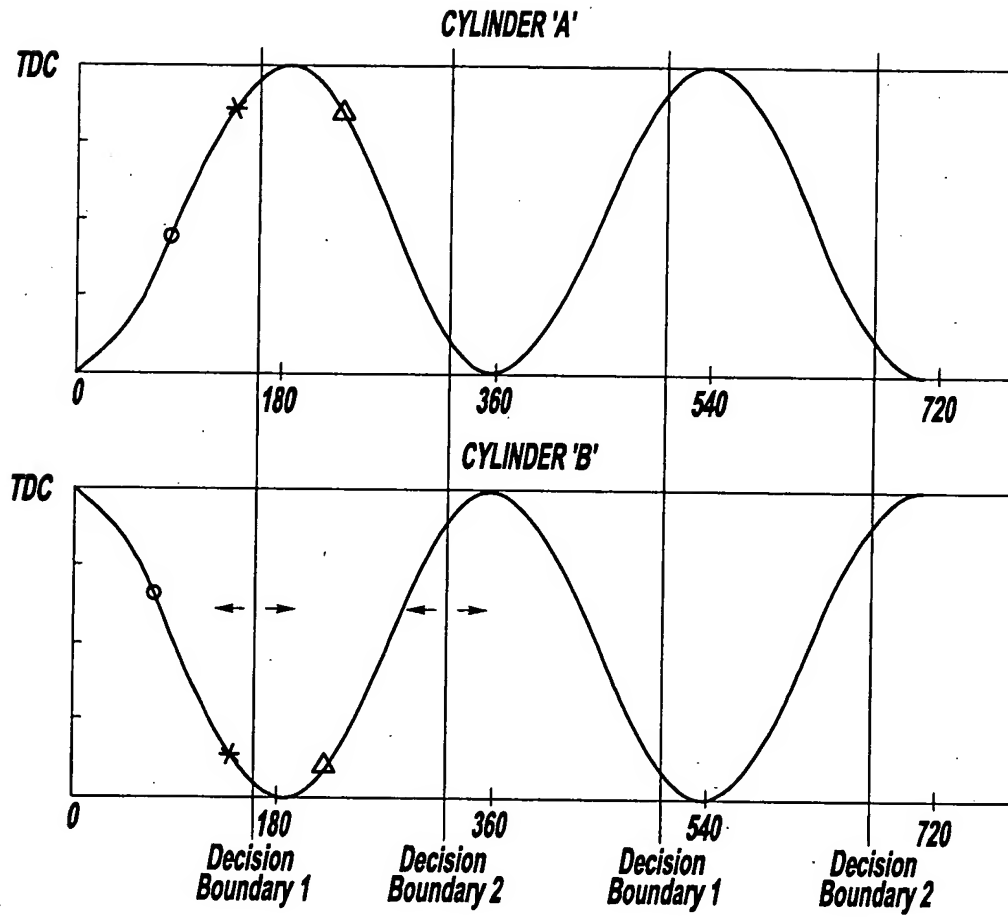
Crank Angle degrees

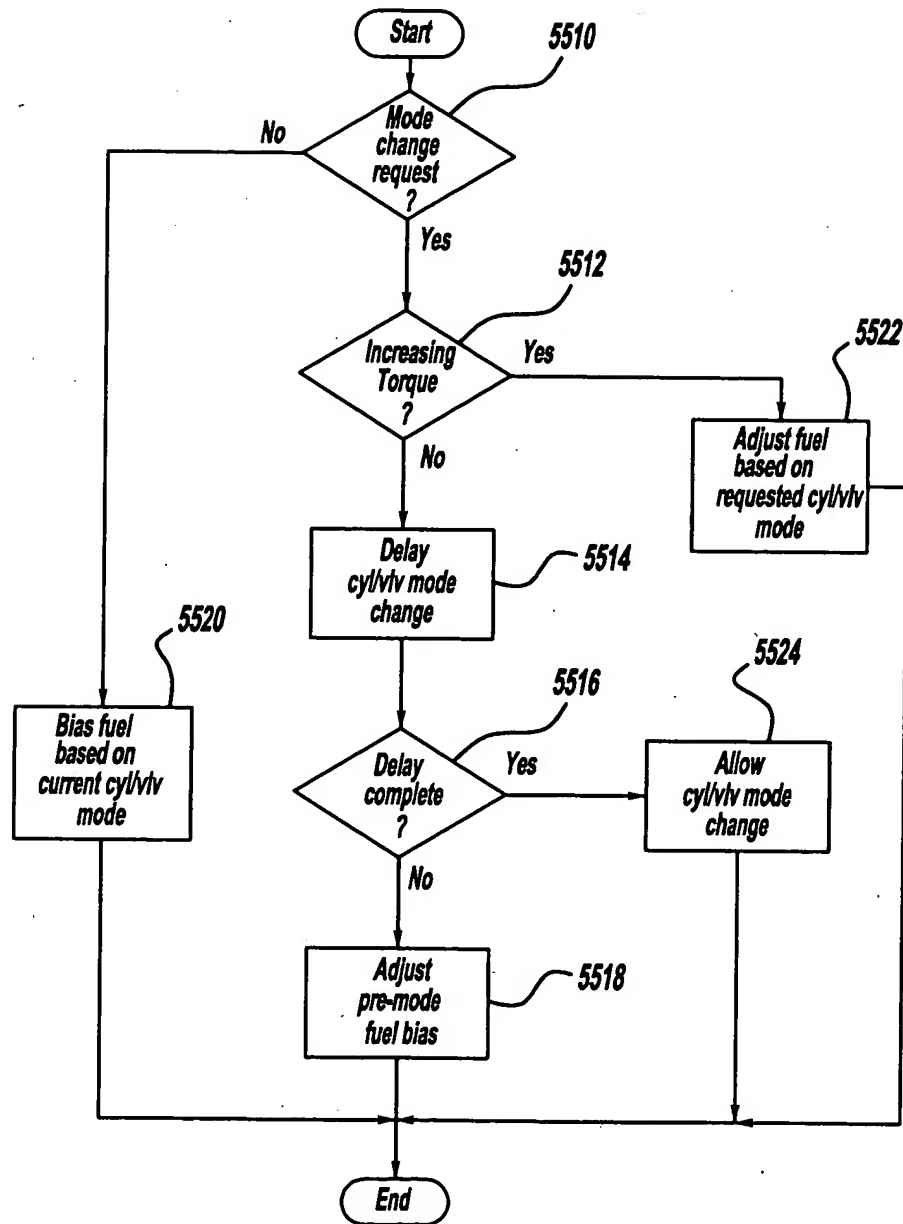
Exhaust Valve Timing From Start (electrical valve operation)

Cylinder piston position cyl 1 & 4

Cylinders 2 & 3

**FIG - 53b**

**FIG - 54**

**FIG - 55**